Installation/Service Manual for:

Series 06

L915 Commercial Wheelchair Lifts

Including Models:

- L915
- L915F
- L916
- L916F
- L917
- L917F
- L918
- L918F
- L919
- L919F
- L915IB
- L915FIB
- L916IB
- L916FIB
- L917IB
- L917FIB
- L918IB
- L918FIB
- L919IB
- L919FIB

and Special Order L915 Series Lift Models

L915 b

THE BRAUN CORPORATION®
"Providing Access to the World"®
International Corporate Hdqrs: P.O. Box 310 Winamac, IN 46996 USA
1-800-THE LIFT (574) 946-6153 FAX: (574) 946-4670

See inside cover for warranty and registration information.

WARNING
Manual
Read manual before installing or servicing lift. Failure to do so may result in serious bodily injury and/or property damage.

25522-06
July 2002
Patent #5,261,779
Patent #5,806,632
Patent #6,065,924
Patent #6,238,169
Patents Pending
complying with ADA Americans With Disabilities Act

Braun Corporation Product Bulletin

Subject: Supplement 29376 addresses various lift installation updates as well as Series **A6** technical information. Further details are outlined below.

Published: January 2003

The Braun Serial No./Series No. Identification Tag is posted on the opposite pump side tower. Note the lift model number and the series number.

If you have a Series **A6** or later lift model, **read this supplement as well as all information contained in** L915 Millennium Series™ **06** Installation/Service manual 25522-**06** (and additional supplements), **before** installing the lift, servicing the lift or ordering replacement parts.

Lift Installation Updates:

Lift Ground: Two ground cables are provided with each lift. One ground cable is pump mounted (standard - no change). An additional external battery-to-frame ground cable is now supplied (effective September 2002). Both cables must be mounted to a common vehicle framing member to provide **optimum ground.** Details are provided in this supplement.

Compact Circuit Sentry: Effective September 2002, compact Circuit Sentry Kit 28910KS is supplied with 12 volt lift models to provide greater installation versatility (less space required). Two types of mounting brackets are supplied (a flush mount bracket and an offset mount bracket). Choose the mounting bracket most suitable for your application (installation details are provided).

Lift Installation Package: The Installation Parts List appearing on page 8 of this manual does not address the additional ground cable, the compact Circuit Sentry or the associated small parts. These and other installation parts list changes are addressed in this supplement.

Service:

Series A6 (Up Solenoid): Series **A6** (and later) lift models are equipped with Prestolite Up solenoid 28308 (effective April 2002). Refer to this supplement for Series **A6** technical information. An electrical schematic, a wiring diagram and pump module exploded views (with part numbers) applicable for Series **A6** are provided.

Platform Side Plate Modification: Effective September 2002, the right (front) side plate of 30" wide platforms was modified (L915, L916, L925 and L926 lift models). This modification is not depicted in the Lift Terminology Illustration on page 2 of this manual or addressed in the Repair Parts section. The modified platform and associated components are addressed in this supplement.

Contact The Braun Corporation at 1-800-THE LIFT if you have any questions regarding this bulletin.

All illustrations, descriptions and specifications in this supplement are based on the latest product information available at the time of publication. The Braun Corporation reserves the right to make changes at any time without notice.

Series A6 and Installation Supplement Contents

Lift Installation
- Installation Parts 2
- Lift Ground 2, 3
- Compact Circuit Sentry 4, 5

Troubleshooting
- Series A6 Electrical Schematic 6
- Series A6 Wiring Diagram 7

Repair Parts
- Series A6 Rear Pump Module 8, 9
- Series A6 Front Pump Module 10, 11
- Platform Side Plate Modification 12

Installation Parts

Lift Installation Package: The Installation Parts List appearing on page 8 of this manual does not address the additional ground cable, the compact Circuit Sentry or the associated small parts. Refer to the updates below regarding these changes and other unrelated part number corrections.

Installation Parts (reference manual page 8)

Part Number Updates

Item 1: The current part number for the underfloor reinforcement brackets is 25915-04.

Item 4: Two 3/8-16 x 1" hex bolts are now supplied. The second bolt is supplied for installation of the battery-to-frame ground cable (if applicable).

Item 17: Two 13/32" I.D. x 1/2" spacers are now supplied. The second spacer is supplied for installation of the battery-to-frame ground cable (if applicable).

Item 18: Compact Circuit Sentry Kit 28910KS is supplied with 12 volt lift models (in Parts Package 25853A-A4). Circuit Sentry assembly 18190A is being supplied with 24 volt lifts (in Parts Package 26155A-A4).

Item 19: The 1/8" x 4" x 4" flat plastic insulator is no longer supplied in Parts Package 25853A-A4. The plastic insulator is not used with Compact Circuit Sentry Kit 28910KS.

Item 25: The current part number for the Lift Operating Instructions decal is 27204.

Item 27: The current part number for the Lift Operation video is 28332.

Item 28: The current part number of the Lift Installation/Service manual is 25522-06.

Additional (Nonlisted) Parts

Battery-to-frame ground cable 22166A is supplied with all lifts (12 volt and 24 volt).

Two 5/16-18 x 3/4" thread cutting screws (part number 21735) are supplied for mounting both ground cables to the frame (one per cable).

Two 5/16" external tooth star washers (part number 16368) are supplied for mounting both ground cables to the frame (one per cable).

Lift Ground

Power Cable and Ground Cable Installation
(reference page 17)

Two ground cables are provided with each lift. One ground cable is pump mounted (standard - no change). An additional external battery-to-frame ground cable is now supplied. Both cables must be mounted to a common vehicle framing member to provide **optimum ground.** Refer to following details and Figure 1.

Note: When mounting ground cables, remove undercoating, dirt, rust, etc. from the framing member around the mounting holes (minimum 5/8" diameter area). Apply a protective coating of grease to mounting holes to prevent corrosion. Apply grease to ground cable terminals and mounting screws also. **Failure to do so will void warranty of certain electrical components**.

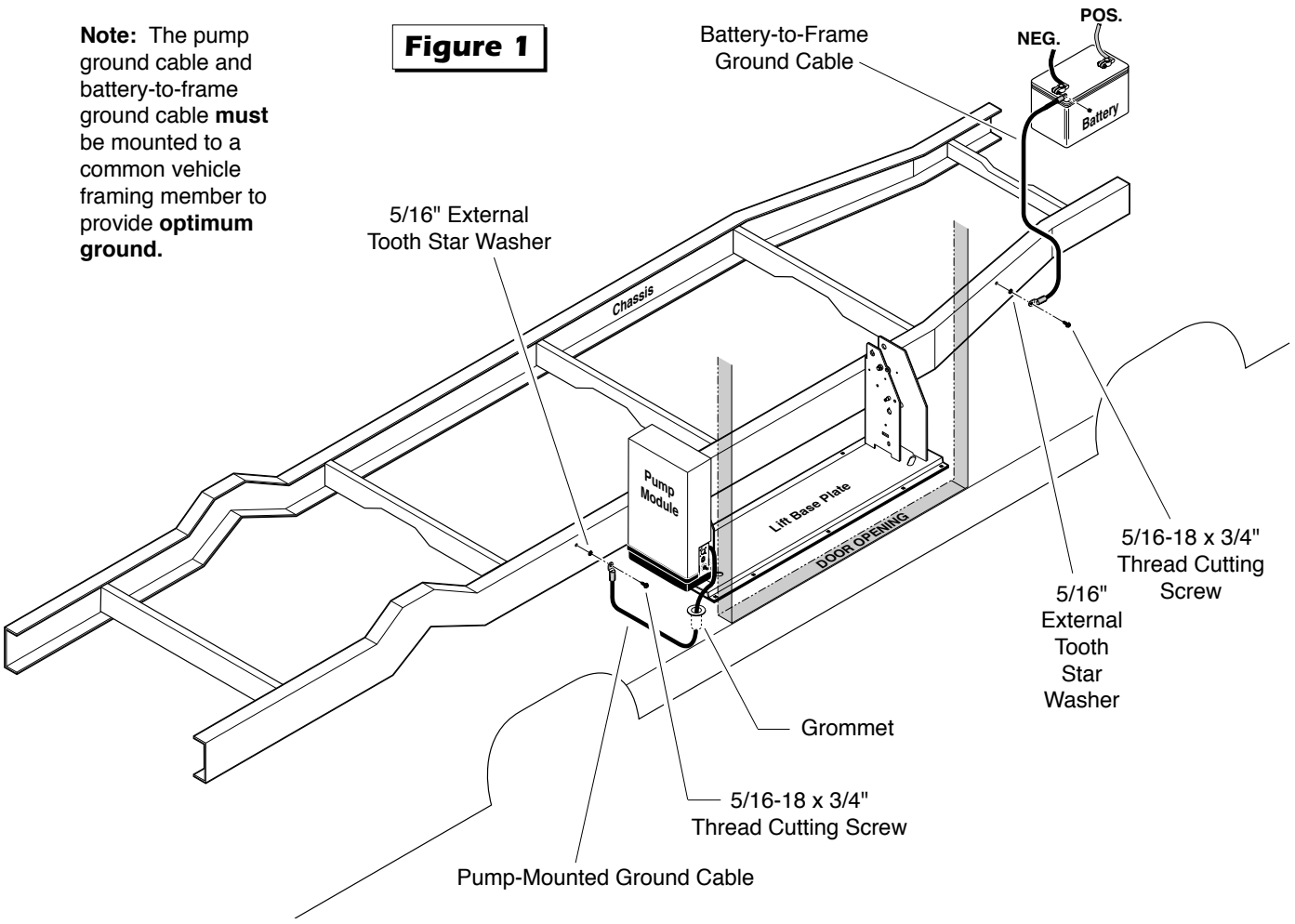
Lift Ground (continued)

Power Cable and Ground Cable Installation
(reference page 17)

Connect battery-to-frame ground cable to **negative** (-) battery post.

Note: The pump ground cable and battery-to-frame ground cable **must** be mounted to a common vehicle framing member to provide **optimum ground.**

Figure 1



Pump Mounted Ground Cable:

Route the pump ground cable through the plastic floor grommet (shown in Figure 1 and the photo on manual page 17). Position and secure the ground cable clear of lift operation. Secure the cable to a main vehicle framing member. Drill a 9/32" diameter pilot hole in the frame. Mount the cable using a 5/16-18 x 3/4" thread cutting screw. Position a 5/16" external tooth star washer between the cable eye terminal and the frame. Prepare the cable mounting surface and apply grease to frame and hardware as previously detailed (see **Note** on page 2).

Power Cable

Route, secure and connect the power cable as detailed on pages 17 and 18 of this manual.

Vehicle Battery Ground Cable:

The external battery-to-frame ground cable supplied with the lift **must be** connected to the same vehicle framing member that the pump ground cable is attached to. Connect the cable to the **negative** (-) battery post. **Note:** A 3/8-16 x 1" bolt and a 13/32" I.D. x 1/2" tubing spacer are provided for side terminal mount batteries.

Secure the opposite end of the cable to the vehicle framing member. Drill a 9/32" diameter pilot hole in the frame. Mount the cable using a 5/16-18 x 3/4" thread cutting screw. Position a 5/16" external tooth star washer between the cable eye terminal and the frame. Prepare the cable mounting surface and apply grease to frame and hardware as previously detailed (see **Note** on page 2).

Compact Circuit Sentry

Circuit Sentry Installation and Power Connection (reference page 19)

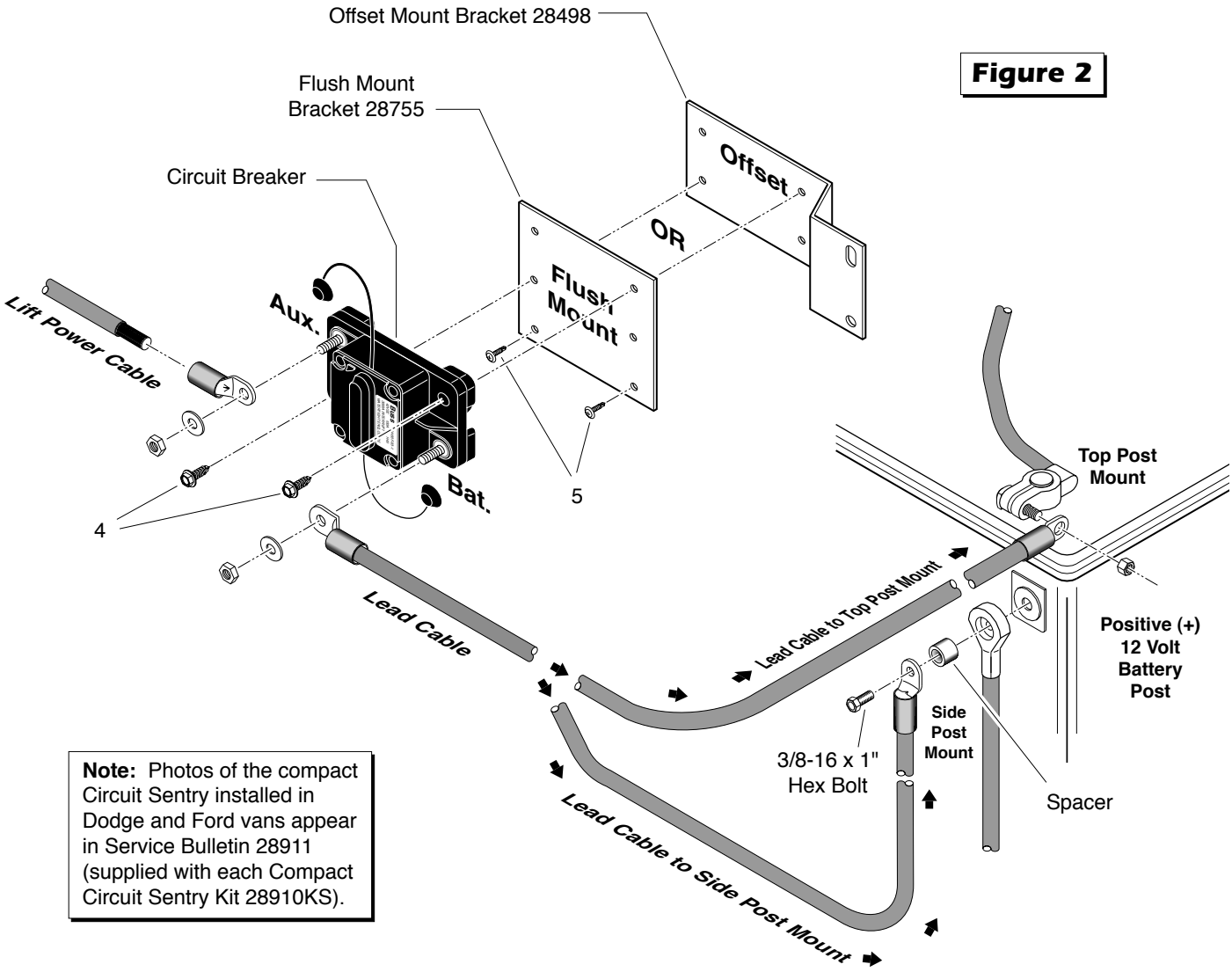


Figure 2

Note: Photos of the compact Circuit Sentry installed in Dodge and Ford vans appear in Service Bulletin 28911 (supplied with each Compact Circuit Sentry Kit 28910KS).

Note: Compact Circuit Sentry Kit 28910KS is supplied with 12 volt lift models **only** (in Parts Package 25853A-A4). Circuit Sentry assembly 18190A is supplied with 24 volt lifts (in Parts Package 26155A-A4). Install 24 volt Circuit Sentry assembly 18190A as detailed on page 19 of this manual.

Compact Circuit Sentry Kit 28910KS

Item	Qty.	Description	Part No.
1	1	Bracket, Flush Mount (Dodge)	28755
2	1	Bracket, Offset Mount (Ford/Chevy)	28498
3	1	Circuit Breaker, 100 Amp.	28704
4	4	Screw, 1/4-14 x 1", Self Drilling, Hex	14145
5	4	Screw, #8-18 x 3/4", Self Drilling, Wafer. Hd.	18790
6	1	Decal, 100 Amp. Circuit Sentry	18181

Compact Circuit Sentry

Circuit Sentry Installation and Power Connection (reference page 19)

Circuit Sentry Kit 28910KS is supplied to provide greater installation versatility (less space required). Two types of mounting brackets are supplied (shown in Figure 2). Bracket 28755 is a flush mount bracket (without offset). Bracket 28498 is an offset mount bracket. Either bracket can be used as desired.

Select an appropriate mounting surface in the engine compartment or vehicle battery location. Select the appropriate mounting bracket based on the available mounting surface and other variables. Mounting brackets can be oriented as needed.

The Circuit Sentry must be positioned such that the lead cable will reach the vehicle battery. Locate the Circuit Sentry within 24" of the **positive (+)** battery terminal.

Note: Photos of the compact Circuit Sentry installed in Dodge and Ford vans appear in Service Bulletin 28911 (supplied with each Compact Circuit Sentry Kit).

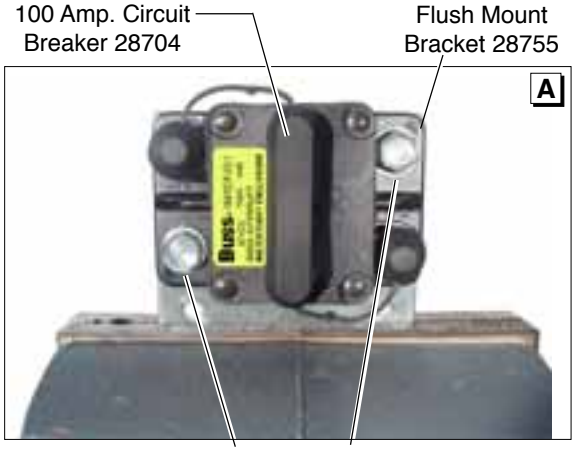
Mount Circuit Breaker

Mount the circuit breaker to the mounting bracket. See Figure B and Photo A. Four .191" diameter holes spaced 1" apart are provided in each mounting bracket. The holes match the pattern of circuit breaker mounting holes.

Place the bracket securely in a vice gripping the edge that does not obstruct positioning of the circuit breaker (see Photo A). Mount the breaker to the bracket using two 1/4-14 x 1" washer hex head self-drilling screws.

#8-18 x 3/4" wafer head self-drilling screws are supplied to mount the circuit breaker and mounting bracket assembly. **Note:** Optional (OEM) mounting hardware can be utilized in some applications. Mount the bracket as needed.

Check for obstructions such as fuel lines, coolant lines, wires, exhaust, etc. **before drilling**.



Cable Connections

Remove the rubber caps attached to the circuit breaker terminals. Attach the lift power cable to the **Auxiliary** terminal of the Circuit Sentry. Attach one end of the battery lead cable to the Circuit Sentry **Battery** terminal. Tighten securely. Reposition the rubber caps onto the breaker terminals to prevent electrical short circuits. **Carefully** connect the opposite end of the battery lead cable to the **Positive** (+) post of the battery.

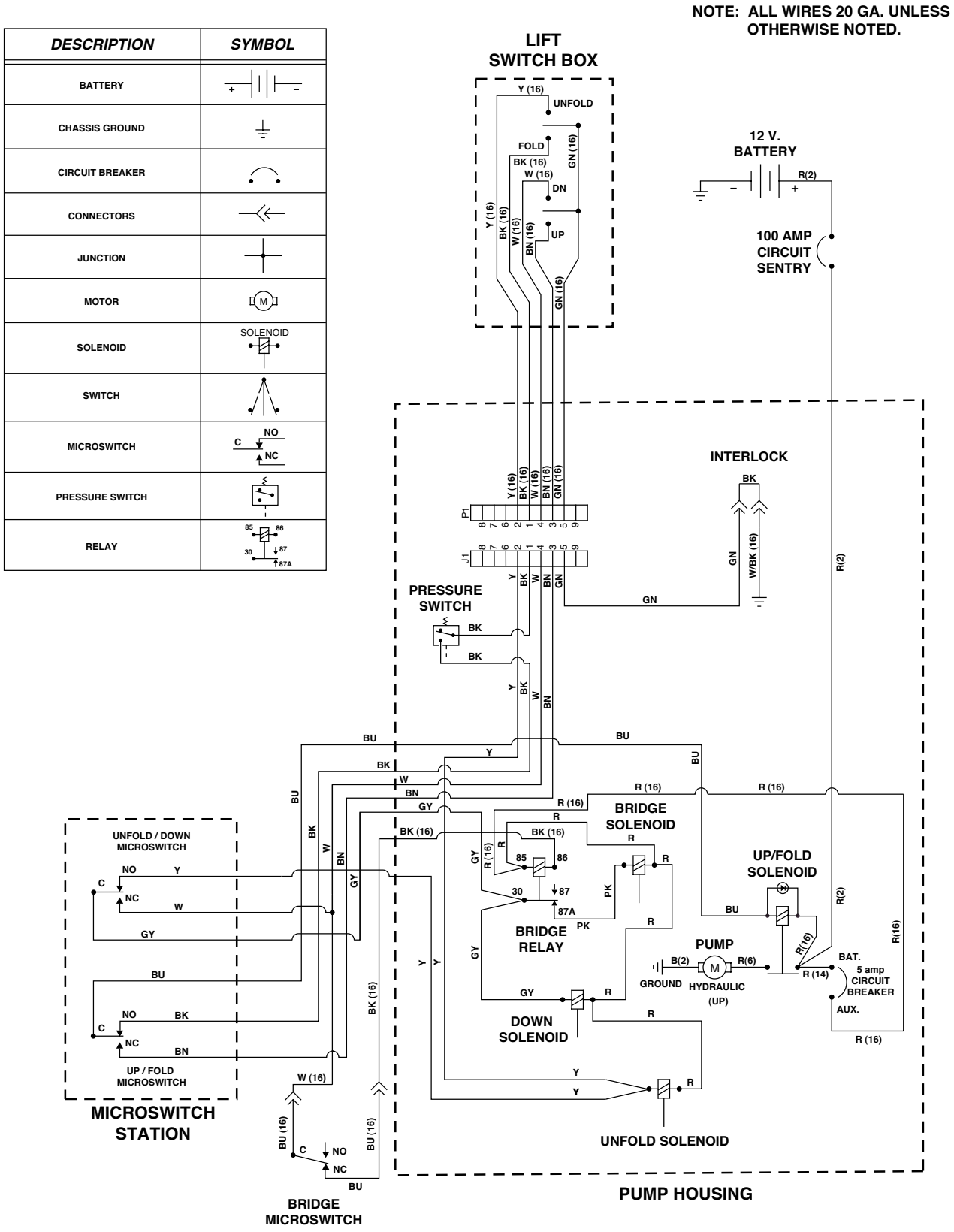
Decal 18181

Post decal 18181 adjacent to the Circuit Sentry assembly (provides circuit breaker reset instructions).

Note: Clean the surface with isopropyl alcohol **before** decal application. Use a clean cloth or paper towels. **DO NOT** use oily shop rags. Wipe surface free of residue with dry portion of cleaning cloth.

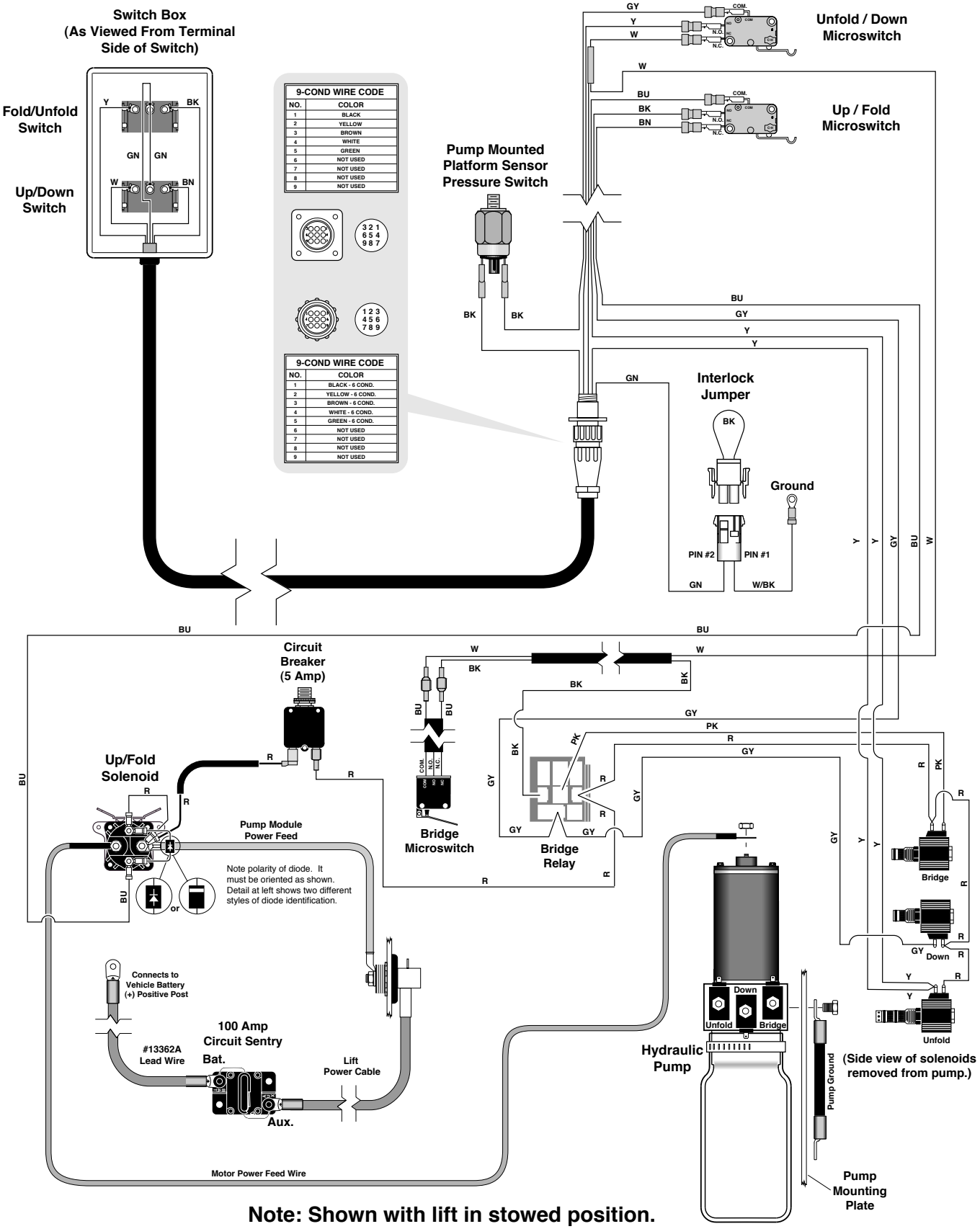
Series A6 Lift Electrical Schematic

Note: Shown with lift in stowed position.



Series A6 Lift Wiring Diagram

Note: Shown with lift in stowed position.



Note: Shown with lift in stowed position.

Series A6 Rear Pump Module Parts List

			L915, L915IB L918, L918IB	L916, L916IB L917, L917IB L919, L919IB
Item	Qty.	Description	Part No.	Part No.
	1	Pump Module (complete), 12 Volt, Rear	915R6516IBQD	915R6516IBQD
1	1	Pump Assembly (M268 **with** Reservoir/**with** Backup pump) Bridge, Prestolite	25597A12V-A6	25597A12V-A6
2	2	Fitting, 7/16"-20 O-Ring Male / 7/16"-20 JIC 37° Male	24504	24504
3	1	Elbow, 7/16"-20 JIC 37° Female Swivel (1) / 7/16"-20 JIC 37° Male (2)	26579	26579
4	1	Switch, Pressure	26577	26577
5	1	Harness, Pressure Switch / Up - Fold Microswitch	25811A	25811A
6	1	**See Control Box Assembly and Harness Options** ✘ See note below		
7	1	**See Control Box Assembly and Harness Options** ✘ See note below		
8	1	Control Box, Bracket-mount (Items 9, 10 and 11) ✘ See note below	16970A	16970A
9	1	Control Box (only) ✘ See note below	16932	16932
10	1	Clip, Bracket-mount ✘ See note below	16933	16933
11	3	Screw, #6-20 x 1-1/4", Pan Head, Phillips ✘ See note below	16945	16945
12	1	Face Plate and Switch Assembly ✘ See note below	17909A-05	17909A-05
13	1	Face Plate ✘ See note below	16931-05	16931-05
14	1	Switch, S.P.D.T., Rocker (Unfold/Fold) - Orange ✘ See note below	17332	17332
15	1	Switch, S.P.D.T., Rocker (Down/Up) - Red ✘ See note below	16942	16942
16	4	Screw, #6-20 x 3/4", Pan Head, Phillips ✘ See note below	24739	24739
17	1	Strain Relief (SR 7W-2) ✘ See note below (7A, 7B and 7C only)	11352	11352
18	1	Cover, Switch Box	26798	26798
19	1	Plate, Backing / Mounting, Rear - Series A6	915R6501	915R6501
20	1	Harness, Pump Module ✘ See note below	918R3914IBQD	915R3914IBQD
21	4	Snap Rivet, 1/8", Nylon, Black	25759	25759
22	1	Jumper, Interlock ✘ See note below	15708A	15708A
23	1	Relay, 30 Amp, S.P.D.T., 12 Volt ✘ See note below	18087	18087
24	1	Pop Rivet, SD64BS, 3/16" ✘ See note below	11513	11513
25	1	Washer, #10 Flat	11541	11541
26	2	Washer, 5/16" Flat	10063	10063
27	1	Cable, Ground - 36" ✘ See note below	26161A	26161A
28	4	Bolt, 5/16"-18 x 1/2", Nylock, Hex (3 shown) * See note below	10012	10012
29	1	Solenoid, Up - Prestolite Short / 100 Amp - 12V	28308	28308
30	1	Jumper, 16 Gauge	800-2000	800-2000
31	1	Diode Assembly, Up Solenoid	73906A	73906A
32	1	Power Cable, Millennium - Up Solenoid to Motor	29049	29049
33	1	Harness, Solenoid / Microswitch	25810A	25810A
34	1	Cable, Pump Module Hookup / Power	26082A-4	26082A-4
35	1	Harness, Up Solenoid / Circuit Breaker	25809A	25809A
36	1	Circuit Breaker, 5 Amp, Manual Reset	25736	25736
37	1	Stud, Power Feed	26084	26084
38	1	Cable, Lift Power, 37' with Loom ✘ See note below	205-0712-37	205-0712-37
39	1	Rubber Boot, Red ✘ See note below	82046	82046
40	1	Clip, Cable, 1/2", Plastic ✘ See note below	10092	10092
41	1	Snap Rivet, 3/16", Nylon, Black ✘ See note below	25973	25973
42	1	Clamp, Hose	17069	17069

Control Box Assembly and Harness Options

Item	Qty.	Description	Part No.
6A	1	Control Box Assembly (with **Standard** Quick Disconnect Harness) ✘ See Note Below	900-0903AQD
6B	1	Control Box Assembly (with **Armored** Quick Disconnect Harness) ✘ See Note Below	900-0903AQDA
6C	1	Control Box Assembly (with **Coiled** Quick Disconnect Harness) ✘ See Note Below	900-0903AQDC
6D	1	Control Box Assembly (with **7' Long, 18 Ga.**, Quick Disconnect Harness) ✘ See Note Below (**not shown**)	900-5903AQD
7A	1	Harness, **Standard**, Quick Disconnect (**without control box**) ✘ See Note Below	900-0902AQD
7B	1	Harness, **Armored**, Quick Disconnect (**without control box**) ✘ See Note Below	900-0902AQDA
7C	1	Harness, **Coiled**, Quick Disconnect (**without control box**) ✘ See Note Below	900-0902AQDC
7D	1	Harness, **7' Long, 18 Ga.**, Quick Disconnect (**without control box**) ✘ See Note Below (**not shown**)	900-5902AQD

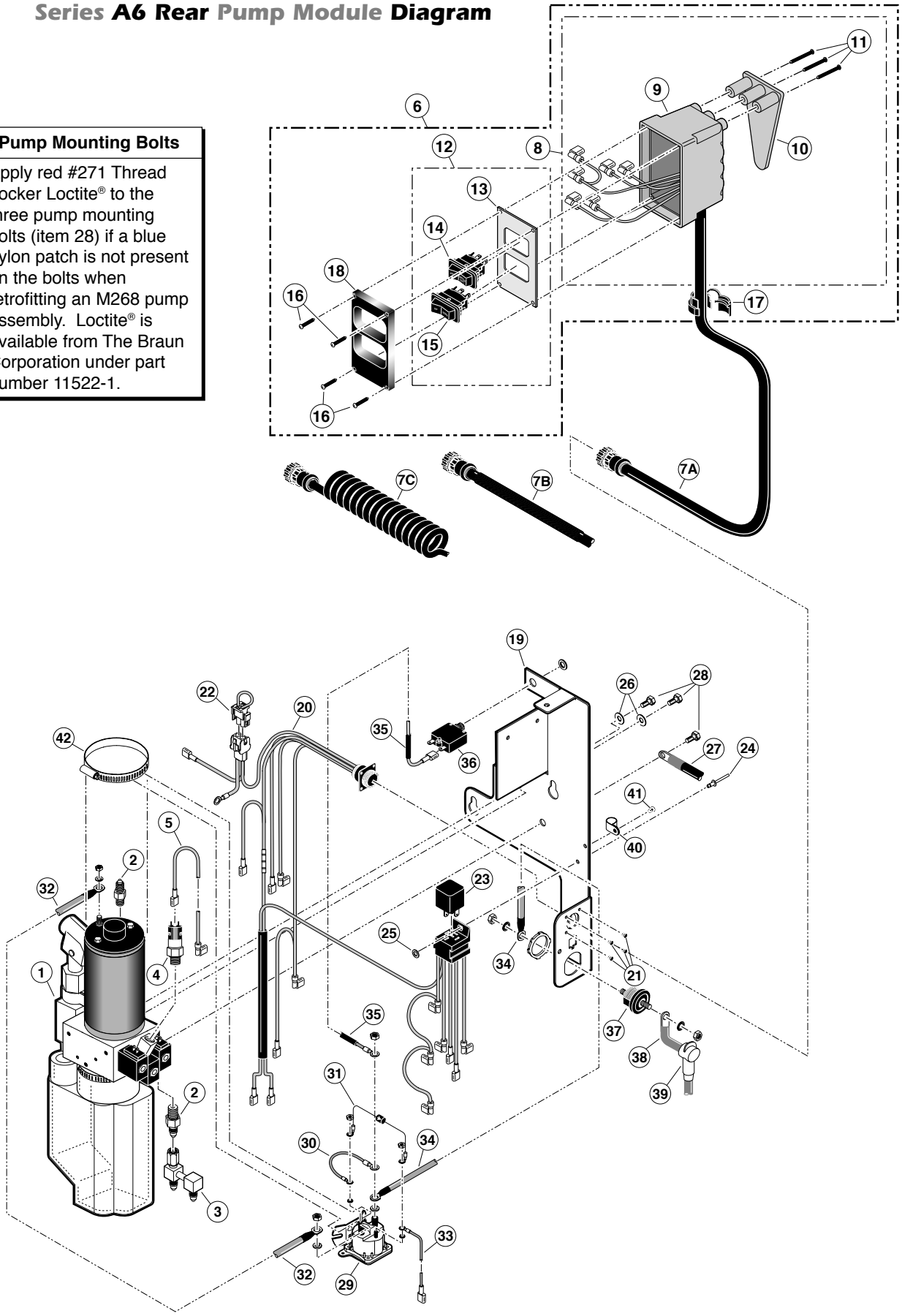
✘ Indicates items available for replacement part purposes **only**. These items **are not** included with replacement pump modules.

* Apply red #271 Thread Locker Loctite® to the three pump mounting bolts (item 28) if a blue nylon patch is not present on the bolts when retrofitting an M268 pump assembly. Loctite® is available from The Braun Corporation under part number 11522-1.

Series A6 Rear Pump Module Diagram

Pump Mounting Bolts

Apply red #271 Thread Locker Loctite® to the three pump mounting bolts (item 28) if a blue nylon patch is not present on the bolts when retrofitting an M268 pump assembly. Loctite® is available from The Braun Corporation under part number 11522-1.



Series A6 Front Pump Module Parts List

Item	Qty.	Description	L915F, L915FIB L918F, L918FIB Part No.	L916F, L916FIB L917F, L917FIB L919F, L919FIB Part No.
	1	Pump Module (complete), 12 Volt, Rear	915F6516IBQD-A6	915F6516IBQD-A6
1	1	Pump Assembly (M268 **with** Reservoir/**with** Backup pump), Bridge, Prestolite	25597A12V-A6	25597A12V-A6
2	2	Fitting, 7/16"-20 O-Ring Male / 7/16"-20 JIC 37° Male	24504	24504
3	1	Elbow, 7/16"-20 JIC 37° Female Swivel (1) / 7/16"-20 JIC 37° Male (2)	26579	26579
4	1	Switch, Pressure	26577	26577
5	1	Harness, Pressure Switch / Up - Fold Microswitch	25811A	25811A
6	1	**See Control Box Assembly and Harness Options** ✘ See note below		
7	1	**See Control Box Assembly and Harness Options** ✘ See note below		
8	1	Control Box, Bracket-mount (Items 9, 10 and 11) ✘ See note below	16970A	16970A
9	1	Control Box (only) ✘ See note below	16932	16932
10	1	Clip, Bracket-mount ✘ See note below	16933	16933
11	3	Screw, #6-20 x 1-1/4", Pan Head, Phillips ✘ See note below	16945	16945
12	1	Face Plate and Switch Assembly ✘ See note below	17909A-05	17909A-05
13	1	Face Plate ✘ See note below	16931-05	16931-05
14	1	Switch, S.P.D.T., Rocker (Unfold/Fold) - Orange ✘ See note below	17332	17332
15	1	Switch, S.P.D.T., Rocker (Down/Up) - Red ✘ See note below	16942	16942
16	4	Screw, #6-20 x 3/4", Pan Head, Phillips ✘ See note below	24739	24739
17	1	Strain Relief (SR 7W-2) ✘ See note below (7A, 7B and 7C only)	11352	11352
18	1	Cover, Switch Box	26798	26798
19	1	Plate, Backing / Mounting, Front - Series A6	915F6501	915F6501
20	1	Harness, Pump Module ✘ See note below	918R3914IBQD	915R3914IBQD
21	4	Snap Rivet, 1/8", Nylon, Black	25759	25759
22	1	Jumper, Interlock ✘ See note below	15708A	15708A
23	1	Relay, 30 Amp, S.P.D.T., 12 Volt ✘ See note below	18087	18087
24	1	Pop Rivet, SD64BS, 3/16" ✘ See note below	11513	11513
25	1	Washer, #10 Flat	11541	11541
26	2	Washer, 5/16" Flat	10063	10063
27	1	Cable, Ground - 36" ✘ See note below	26161A	26161A
28	4	Bolt, 5/16"-18 x 1/2", Nylock, Hex (3 shown) * See note below	10012	10012
29	1	Solenoid, Up - Prestolite Short / 100 Amp - 12V	28308	28308
30	1	Jumper, 16 Guage	800-2000	800-2000
31	1	Diode Assembly, Up Solenoid	73906A	73906A
32	1	Power Cable, Millennium - Up Solenoid to Motor	29049	29049
33	1	Harness, Solenoid / Microswitch	25810A	25810A
34	1	Cable, Pump Module Hookup / Power	26082A-4	26082A-4
35	1	Harness, Up Solenoid / Circuit Breaker	25809A	25809A
36	1	Circuit Breaker, 5 Amp, Manual Reset	25736	25736
37	1	Stud, Power Feed	26084	26084
38	1	Cable, Lift Power, 37' with Loom ✘ See note below	205-0712-37	205-0712-37
39	1	Rubber Boot, Red ✘ See note below	82046	82046
40	1	Clamp, Hose	17069	17069

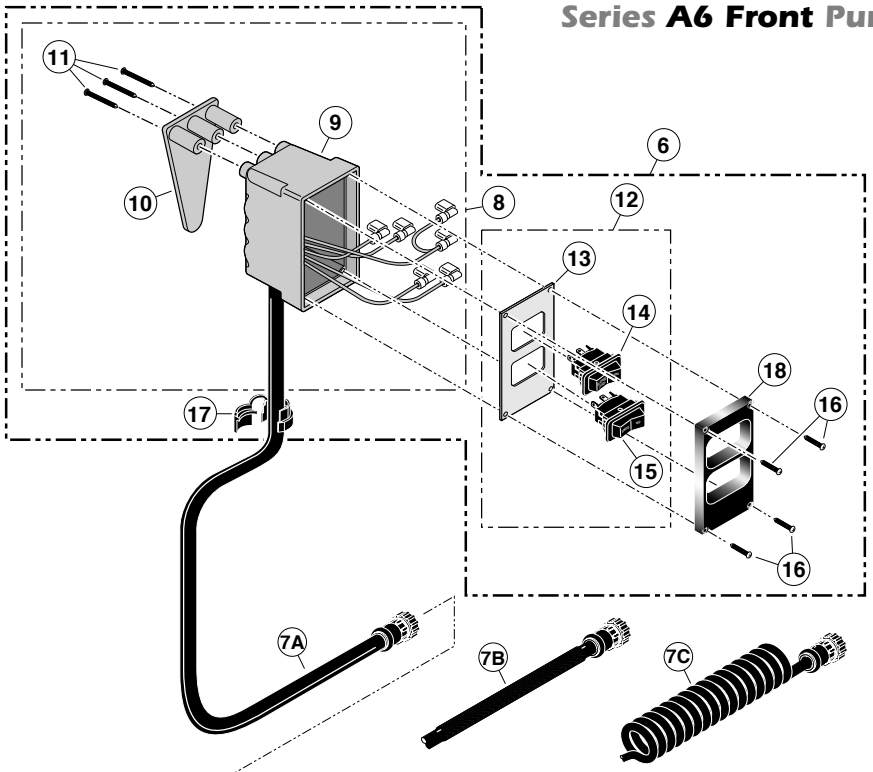
Control Box Assembly and Harness Options

Item	Qty.	Description	Part No.
6A	1	Control Box Assembly (with **Standard** Quick Disconnect Harness) ✘ See Note Below	900-0903AQD
6B	1	Control Box Assembly (with **Armored** Quick Disconnect Harness) ✘ See Note Below	900-0903AQDA
6C	1	Control Box Assembly (with **Coiled** Quick Disconnect Harness) ✘ See Note Below	900-0903AQDC
6D	1	Control Box Assembly (with **7' Long, 18 Ga.**, Quick Disconnect Harness) ✘ See Note Below (**not shown**)	900-5903AQD
7A	1	Harness, **Standard**, Quick Disconnect (**without control box**) ✘ See Note Below	900-0902AQD
7B	1	Harness, **Armored**, Quick Disconnect (**without control box**) ✘ See Note Below	900-0902AQDA
7C	1	Harness, **Coiled**, Quick Disconnect (**without control box**) ✘ See Note Below	900-0902AQDC
7D	1	Harness, **7' Long, 18 Ga.**, Quick Disconnect (**without control box**) ✘ See Note Below (**not shown**)	900-5902AQD

✘ Indicates items available for replacement part purposes **only**. These items **are not** included with replacement pump modules.

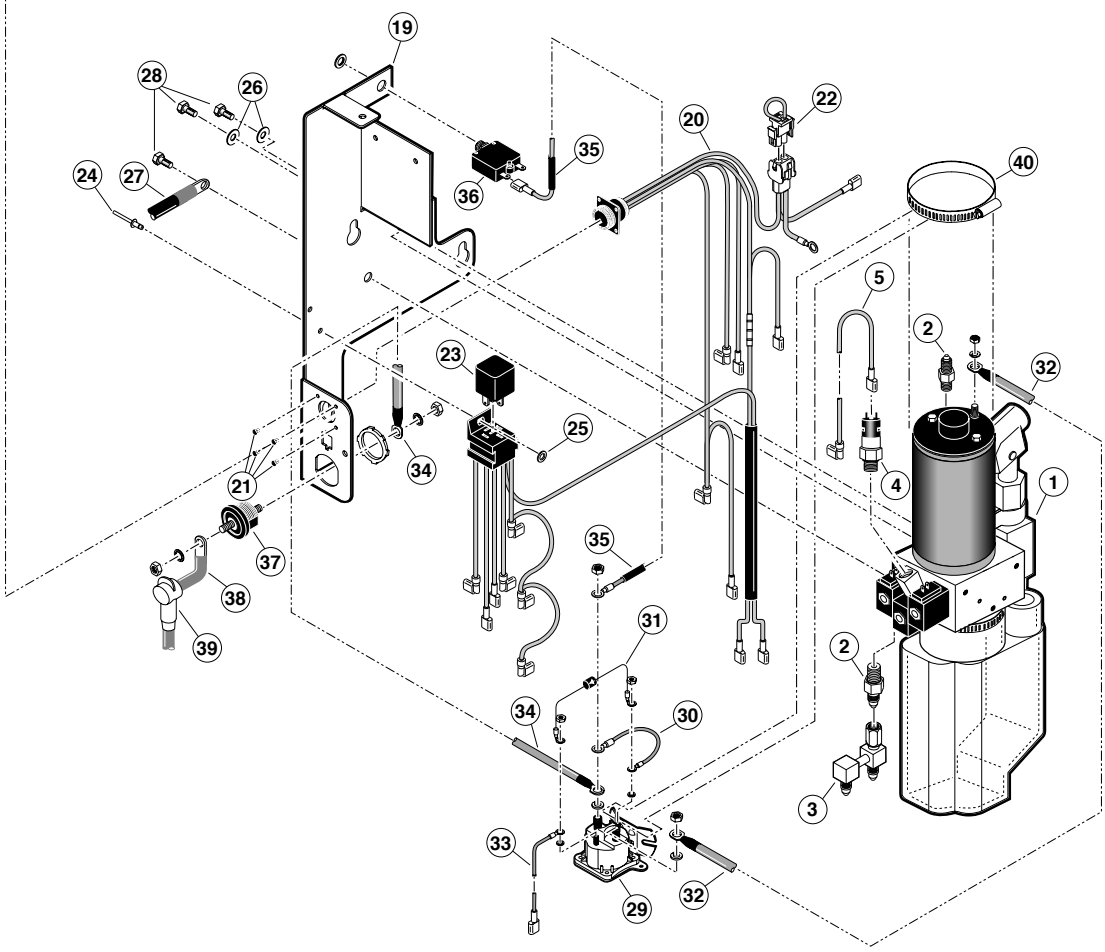
* Apply red #271 Thread Locker Loctite® to the three pump mounting bolts (item 28) if a blue nylon patch is not present on the bolts when retrofitting an M268 pump assembly. Loctite® is available from The Braun Corporation under part number 11522-1.

Series A6 Front Pump Module Diagram



Pump Mounting Bolts

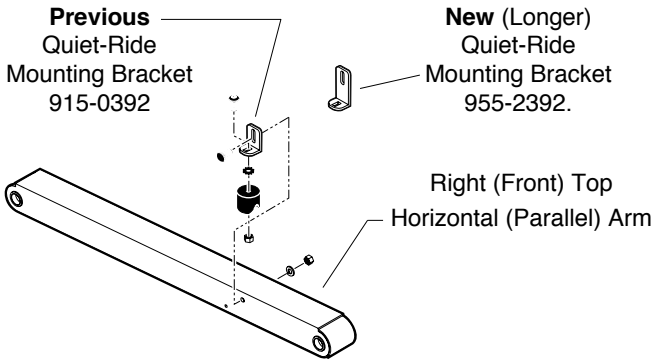
Apply red #271 Thread Locker Loctite® to the three pump mounting bolts (item 28) if a blue nylon patch is not present on the bolts when retrofitting an M268 pump assembly. Loctite® is available from The Braun Corporation under part number 11522-1.



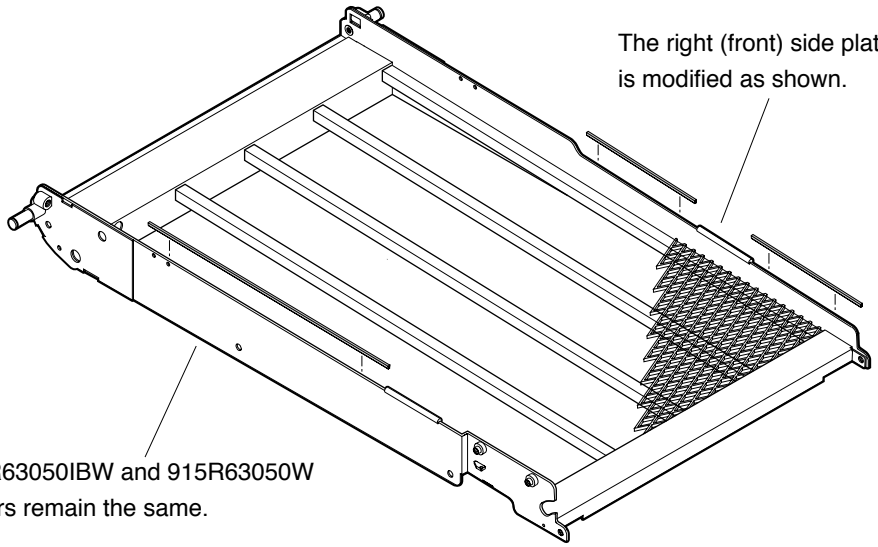
Repair Parts

Lift Exploded Views (reference manual pages 62-69)

Platform Side Plate Modification: Effective September 2002, the right (front) side plate of 30" wide platforms was modified (L915, L916, L925 and L926 lift models). This modification is not depicted in the Lift Terminology Illustration on page 2 of this manual or addressed in the Repair Parts section (Lift Exploded Views and Repair Parts Lists). The modified platform side plate is shown at right.


Previous Quiet-Ride Mounting Bracket 915-0392
New (Longer) Quiet-Ride Mounting Bracket 955-2392.
Right (Front) Top Horizontal (Parallel) Arm

The Quiet-Ride guided stow blocks contact the platform side plates when the lift is folded to the stowed position. Mounting bracket 915-0392 for the stow block on the right (front) side of the lift has been replaced with a longer bracket to accommodate the offset (bracket 955-2392). See the illustration at right. Details follow.


The right (front) side plate is modified as shown.
Platform Weldments 915R63050IBW and 915R63050W
The part numbers remain the same.

Lift Exploded Views (reference pages 62-69)

Automatic Inboard Roll Stop **IB** Lift Models

42" Floor-To-ground **Automatic** Inboard Roll Stop **IB** Lift Models (L915IB and L915FIB **only**)
- **Parts List** 62
- **Exploded View** (Fold Out) 63A, 64A

48" Floor-To-ground **Automatic** Inboard Roll Stop **IB** Lift Models (L916IB and L916FIB **only**)
- **Exploded View** (Fold Out) 63B, 64B
- **Repair Parts List** 65

Item 3: Platform Weldment 915R63050IBW. The part number remains the same as listed. The right (front) side plate is modified as shown.

Item 55: Quiet-Ride Mounting Bracket 915-0392 is now longer bracket 955-2392. Mounting hardware is unchanged.

Fixed Inboard Roll Stop **Non-IB** Lift Models

42" Floor-To-ground **Fixed** Inboard Roll Stop **Non-IB** Lift Models (L915 and L915F **only**)
- **Repair Parts List** 66
- **Exploded View** (Fold Out) 67A, 68A

48" Floor-To-ground **Fixed** Inboard Roll Stop **Non-IB** Lift Models (L916 and L916F **only**)
- **Exploded View** (Fold Out) 67B, 68B
- **Repair Parts List** 69

Item 4: Platform Weldment 915R63050W. The part number remains the same as listed. The right (front) side plate is modified as shown.

Item 53: Quiet-Ride Mounting Bracket 915-0392 is now longer bracket 955-2392. Mounting hardware is unchanged.

Contents

Lift Terminology

Lift Terminology Illustration 2
Introduction 3
Direction 3
Lift Components 3

Lift Installation

Installation/Service Safety Precautions 4, 5
Pre-Installation Notes 6, 7
Lift Installation Instructions
- Installation Parts and Tools Required 8
- Overall Lift Installation Illustrations 9
- Lift Positioning 10-12
- Lift Securement 13-16
- Power Cable and Ground Cable Installation 17, 18
- Circuit Sentry Installation and Power Connection ... 19
- Control Box and Harness Installation 20, 21
- Test Lift Operation 22
- Positioning and Clearance Checklist 22, 23
- Decal Application 24
- Passenger's Seat 24
- Owner's Manual 24

Adjustments

Roll Stop Adjustment Instructions 25
Platform Angle Adjustment Instructions 26, 27
Quiet-Ride Adjustment Instructions 28, 29

Maintenance and Lubrication

Lubrication Diagram and Chart 30
Maintenance and Lubrication Schedule 31-33

Systems Descriptions

General Operation 34
Electrical 34-37
- Microswitches 36, 37

Floor Level Guideline Adjustments 38, 39
Hydraulics 40-43

Troubleshooting

Troubleshooting Diagnosis Chart 44-48
Lift Interlock Installation 49
Lift Electrical Schematic 50
Lift Wiring Diagram 51
18 Guage Lift Control Box Electrical Schematic 52
18 Guage Lift Control Box Wiring Diagram 52

Hydraulics

- **Hydraulic Schematic** 53
- **Rear Pump Hydraulics Parts List** 54
- **Rear Pump Hydraulics Diagram** 55
- **Front Pump Hydraulics Parts List** 56
- **Front Pump Hydraulics Diagram** 57

Repair Parts

Pump Modules
- **Rear** Pump Module **Parts List** 58
- **Rear** Pump Module **Diagram** 59
- **Front** Pump Module **Parts List** 60
- **Front** Pump Module **Diagram** 61

Lift Exploded Views
- **42"** Floor-To-ground **Automatic** Inboard Roll Stop **IB** Lift Models (L915IB, L915FIB, L918IB and L918FIB)
  - **Parts List** 62
  - **Exploded View** (Fold Out) 63A, 64A
- **48"** Floor-To-ground **Automatic** Inboard Roll Stop **IB** Lift Models (L916IB, L916FIB, L917IB, L917FIB, L919IB and L918FIB)
  - **Exploded View** (Fold Out) 63B, 64B
  - **Repair Parts List** 65
- **42"** Floor-To-ground **Fixed** Inboard Roll Stop **Non-IB** Lift Models (L915, L915F, L918 and L918F)
  - **Repair Parts List** 66
  - **Exploded View** (Fold Out) 67A, 68A
- **48"** Floor-To-ground **Fixed** Inboard Roll Stop **Non-IB** Lift Models (L916, L916F, L917, L917F, L919 and L918F)
  - **Exploded View** (Fold Out) 67B, 68B
  - **Repair Parts List** 69

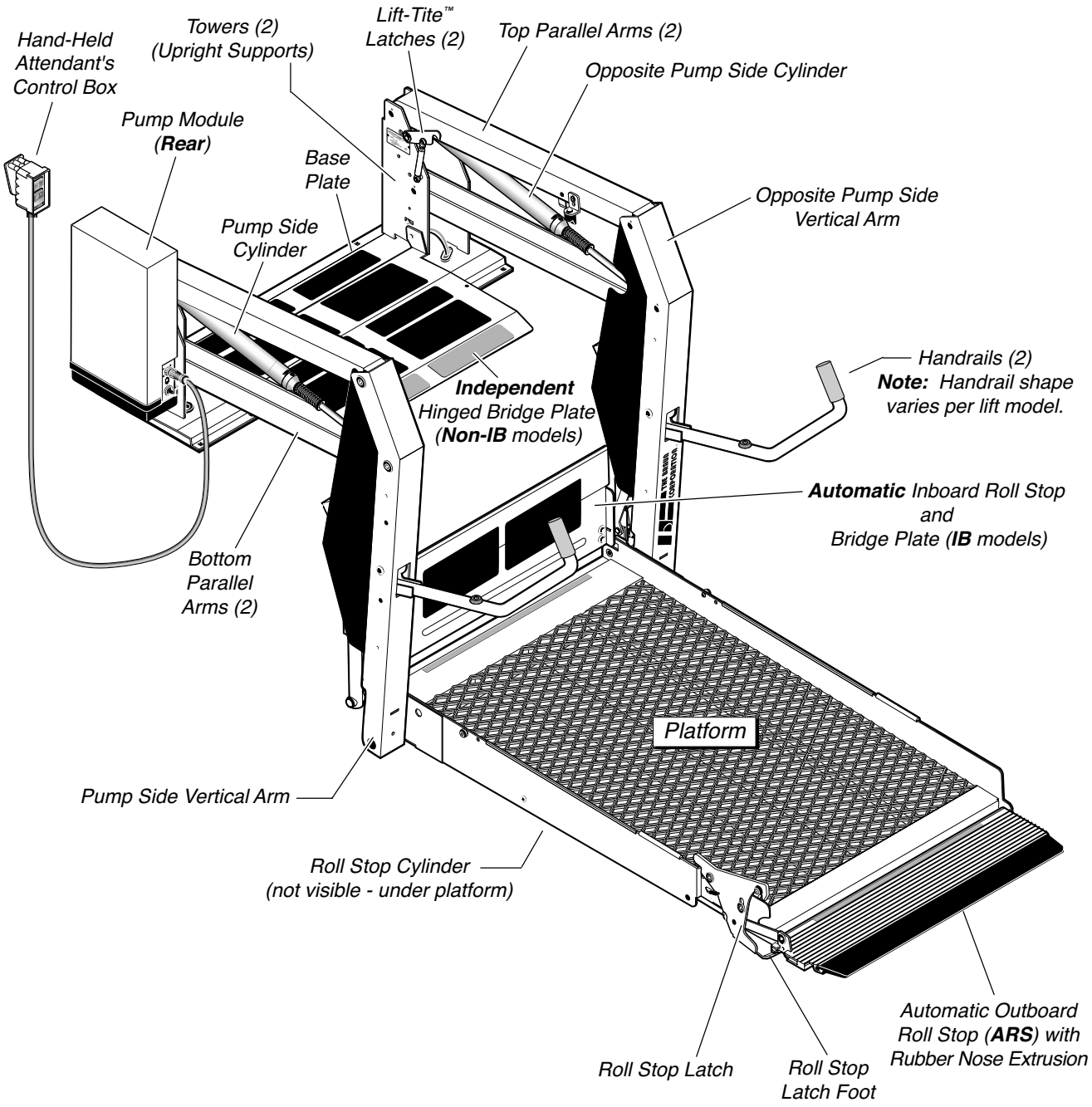
Decals and Antiskid 70-73

Specifications and Dimensions

Lift Specifications 74, 75
Lift Dimensions 76, 77

Warranty and Registration Policy 78

Return Authorization Procedure 78


Hand-Held Attendant's Control Box
Towers (2) (Upright Supports)
Lift-Tite™ Latches (2)
Top Parallel Arms (2)
Opposite Pump Side Cylinder
Pump Module (Rear)
Base Plate
Opposite Pump Side Vertical Arm
Pump Side Cylinder
Handrails (2)
Note: Handrail shape varies per lift model.
Independent Hinged Bridge Plate (Non-IB models)
Automatic Inboard Roll Stop and Bridge Plate (IB models)
Bottom Parallel Arms (2)
Platform
Pump Side Vertical Arm
Roll Stop Cylinder (not visible - under platform)
Automatic Outboard Roll Stop (ARS) with Rubber Nose Extrusion
Roll Stop Latch
Roll Stop Latch Foot

Lift Terminology

Introduction

Braun L915 Millennium Series lifts are ADA compliant and commercial oriented (intended for operation by an attendant). The L915 Millennium Lift Series includes variations of lift models L915, L916, L917, L918 and L919. Model numbers indicate lift dimensions and options.

Lift model numbers with suffix “IB” are equipped with an automatic mechanical inboard roll stop that also serves as the bridge plate. Lift model numbers without suffix “IB” feature a combination stationary inboard roll stop with an independent hinged bridge plate. Inboard roll stop and bridge plate details are provided in Lift Components (at right).

L915 Series lift models can be equipped with left or right side pump modules as needed. Lift model numbers with suffix “F” are right side (front) pump equipped and model numbers without suffix “F” are equipped with a left side (rear) pump. A left side pump-equipped lift model is depicted in the Lift Terminology Illustration. Right side pump lift models are a mirrored image of rear pump models (pump module located on opposite end of base plate).

Refer to the Lift Terminology Illustration for identification of lift components.

Lift installation and lift operation procedures are identical for all L915 Series lift models. Read and become familiar with the lift operating instructions appearing on lift-posted operating instructions decals and the lift installation instructions contained in this manual before beginning installation procedures.

Terminology: Become familiar with the terminology that will be used throughout this manual. Become familiar with the identification of lift components and their functions. Contact your lift sales representative or call The Braun Corporation at 1-800-THE LIFT if any of this information is not fully understood.

Direction: The terms "left (rear)," "right (front)," "inboard," and "outboard" will be used throughout this manual to indicate direction (as viewed from outside the vehicle looking directly at the lift). Refer to the Lift Terminology Illustration for clarification of direction terms.

Lift Components

Pump Module: The lift-mounted pump module consists of the hydraulic pump, the manual hand pump and electrical components that power the lift electric/hydraulic systems.

Hand-held Switch Control Box: The “quick-disconnect” hand-held control switchbox is connected to the pump module. “Quick-disconnect” hand-held controls are available with three types of cable (standard, armored and coiled). The control box is equipped with two color-coded rocker switches, (UNFOLD/FOLD and DOWN/UP). The switches activate the automatic lift functions.

Lift Frame: The lift frame consists of the base plate, two towers, the parallel arms, the vertical arms, platform pivot arms and the handrails. The two main hydraulic cylinders are housed in the parallel arms. The electrical/hydraulic powered lift frame components mechanically unfold, lower, raise and fold the lift platform assembly.

Platform Assembly: The lift platform assembly consists of the steel tubing frame with grating surface upon which the wheelchair is positioned, the outboard roll stop, roll stop latch, the inboard roll stop, and the hydraulic cylinder assembly that powers the outboard roll stop.

Lift-Tite™ Latch: The spring loaded latches prevent the platform from unfolding from the stowed position in event of platform drift.

Outboard Roll Stop: The cylinder-powered automatic outboard roll stop provides a ramp for wheelchair loading and unloading at ground level.

Roll Stop Latch: The spring-loaded latch locks the outboard roll stop in the vertical position when the platform raises above ground level.

Automatic Inboard Roll Stop and Bridge Plate (IB): L915 “IB” lift models are equipped with an automatic mechanical inboard roll stop that also serves as the bridge plate (shown in the Lift Terminology Illustration on page 2). The mechanical roll stop/bridge plate automatically rotates from the horizontal (bridging) position to the vertical (roll stop) position as the lift lowers and raises.

Fixed Inboard Roll Stop: A stationary inboard roll stop is built into “non-IB” L915 lift platforms.

Independent Hinged Bridge Plate: “Non-IB” L915 lift models are equipped with an independent hinged bridge plate (shown in the Lift Terminology Illustration on page 2). The bridge plate bridges the gap between the lift platform and the vehicle floor.

Installation/Service Safety Precautions

Safety Symbols

SAFETY FIRST! Know That....

A The information contained in this manual and supplements (if included), is provided for your use and safety. Familiarity with proper installation, operation, maintenance and service procedures is necessary to ensure safe, troublefree lift operation. Safety precautions are provided to identify potentially hazardous situations and provide instruction on how to avoid them.

B

⚠WARNING

This symbol indicates important safety information regarding a potentially hazardous situation that could result in serious bodily injury and/or property damage.

C

⚠CAUTION

This symbol indicates important information regarding how to avoid a hazardous situation that could result in minor personal injury or property damage.

D **Note:** Additional information provided to help clarify or detail a specific subject.

These symbols will appear throughout this manual as well as on the labels posted on your lift. **Recognize the seriousness of this information.**

Installation/Service Safety Precautions

⚠WARNING

If installation, maintenance or repair procedures cannot be completed exactly as provided in this manual or if the instructions are not fully understood, contact The Braun Corporation immediately. Failure to do so may result in serious bodily injury and/or property damage.

⚠WARNING Read this manual, supplement(s) and lift-posted operating instructions decals before performing installation, operation or service procedures.

⚠CAUTION Minimum clear door opening dimensions specified in Lift Dimensions per lift model must be provided.

⚠WARNING Remove any obstructions within the lift mounting/operating area prior to beginning installation procedures.

⚠WARNING Install lift and power platform to fully folded position before removing shipping straps.

⚠WARNING Do not fold or unfold the platform prior to positive securement of base plate mounting hardware.

⚠WARNING Check for obstructions such as gas lines, wires, exhaust, etc. before drilling or cutting during installation procedures.

⚠WARNING Route all cables clear of exhaust system, other hot areas, moving parts, wet areas, etc.

⚠WARNING Risk of electrical shock or fire! Use extra care when making electrical connections. Connect and secure as outlined in Installation Instructions and Wiring Diagrams.

Installation/Service Safety Precautions

Installation/Service Safety Precautions

⚠WARNING Adjust platform angle and floor level positioning of bridge plates and inboard roll stops as detailed in this manual before operating lift with passenger.

⚠WARNING Meet all lift positioning and clearance specifications as detailed in the Positioning and Clearance Checklist before operating lift with passenger.

⚠WARNING Maintenance and repairs must be performed only by authorized service personnel.

⚠WARNING Perform maintenance and lubrication procedures exactly as outlined in the Maintenance and Lubrication Schedule contained in this manual.

⚠WARNING Disconnect the power cable at the battery prior to servicing.

⚠WARNING Never modify (alter) a Braun Corporation lift.

⚠WARNING Replacement parts must be Braun authorized replacements.

⚠WARNING Never install screws or fasteners (other than factory equipped).

⚠WARNING Whenever replacing a hydraulic cylinder or seals, lower platform fully.

⚠WARNING The lift owner's (operators) manual must be in the lift-mounted manual storage pouch when the consumer receives the lift.

⚠WARNING Failure to follow these safety precautions may result in serious bodily injury and/or property damage.

Pre-Installation Notes

⚠WARNING

Read this manual, supplement(s) and lift-posted operating instructions decals before performing installation, operation or service procedures. Failure to do so may result in serious bodily injury and/or property damage.

❑ **Installation Requirements:**

Braun L915 Millennium Series lifts must be installed and serviced by a Braun authorized service representative who has attended and been certified by The Braun Corporation Sales and Service School for Braun Mobility Products.

Read and become familiar with the lift operating instructions appearing on lift-posted operating instructions decals and the lift installation instructions contained in this manual before beginning installation, operation or service procedures.

❑ **Minimum Clear Door Opening Requirements:**

Minimum Clear Door Opening Dimensions are defined as finished door opening, including any intrusive door jambs, headers, sills or hinges. Any intrusive obstructions within the Clear Door Opening **must** be removed.

Open the door(s) **fully** and check the clear door opening dimensions. **Minimum clear door opening dimensions specified in Lift Dimensions per lift model must be provided.** See the Lift Dimensions section for a complete listing of minimum clear door opening dimensions applicable to your lift model.

⚠CAUTION

Minimum clear door opening dimensions specified in Lift Dimensions per lift model must be provided. Failure to do so may result in property damage.

Braun Bus Door Kits: Braun Retrofit Bus Door Kits are available to provide the required clear opening dimensions. Contact your Braun sales representative or consult the factory.

Van Applications: The required minimum clear door opening height varies depending on the particular lift model. L915 lift models **will not fit** in standard height (OEM) van door openings (**except in 4" lowered floor applications**). A Raised Door Kit **must be used**.

Braun Raised Top Kits and Raised Door Kits are available to provide the minimum required clear door opening dimensions. Contact your Braun dealer or consult the factory.

Stepwell Installations: When installing an L915 model lift in the side cargo door (with stepwell), it is **not** permissible for the base plate to overhang the stepwell. Additional base plate support **must** be constructed in the stepwell for lift support if the base plate overhangs the open stepwell. See page 11 for details.

❑ **Rear Door and Extensive Floor-to-Ground Installations:**

Rear door and extensive floor-to-ground installations **may** require base plate mounting wedges (shims). The top of the lift may need to be tilted inboard slightly to increase platform and vertical arm kickout and/or provide minimum clearances (to provide adequate clearance between lift and vehicle). See page 12 for details.

❑ **Obstructions:**

Any obstructions within the door opening (such as additional seats, molding, lights, brackets, etc.) as well as any obstructions within the lift mounting/operating area **must be removed**. Plastic, rubber or metal molding that creates an uneven mounting surface should be removed. The molding can be modified to fit around the base plate following lift installation procedures.

There **must be a minimum 1/8" clearance between the deployed bridge plate assembly and any obstruction** on the vehicle floor (such as a rubber sill or threshold). See Figure S on page 23.

⚠WARNING

Remove any obstructions within the lift mounting/operating area prior to beginning installation procedures. Failure to do so may result in serious bodily injury and/or property damage.

Pre-Installation Notes

Passenger's Seat (Vans): Position (shift) the passenger seat **fully forward prior** to installation procedures. In vehicles equipped with custom seats, it **may** be necessary to remove the passenger seat prior to installation and reinstall and/or relocate upon completion. If the seat is removed, keep all mounting hardware for possible reinstallation.

Running Boards: If the vehicle is equipped with running boards, it **may** be necessary to remove or modify the running boards to provide adequate lift clearance.

❑ **Platform Drift:**

Read this information **before removing the clear plastic shipping wrap and/or placing the lift in the vehicle**.

Due to the "all-hydraulic" operation of the dual-cylinder L915 Series, hydraulic fluid expansion, contraction or seepage may occur. Any of these conditions can result in platform drift (failure to hold the platform in the folded or raised position). Platform drift may occur during lift shipment and/or between extended periods of non-lift use.

⚠WARNING

Install lift and power platform to fully folded position before removing shipping straps. Failure to do so may result in serious bodily injury and/or property damage.

Plastic straps secure the lift in the stowed position during shipment. **Before removing the shipping straps**, install the lift and power the platform to the fully folded position (press IN switch).

❑ **Chassis Ground:**

The lift **must be properly grounded** for proper operation. Use of star washers, the external ground cable and following the outlined Chassis Ground Notice procedures will provide **optimum ground.**

External Tooth Star Washers: In an effort to provide maximum ground to the lift system, eight 3/8" external tooth star washers are now supplied with each lift. Position star washers as detailed in Installation Instructions.

External Ground Cable: L915 pump modules feature an external ground cable. Route the external ground cable through the floor grommet (details on page 17 of this manual). Secure the ground cable below the floor with one of the base plate mounting bolts.

Chassis Ground Notice (Mounting Bolt Ground): When installing through-floor mounting bolts, remove (grind, sand, etc.) powder coating (paint) from the area around one or more lift base plate mounting holes and remove any undercoating, dirt, rust, etc. from the underside of the vehicle floor metal surface equal in size to the mounting hardware in order to provide **optimum ground** to the electrical system. Apply a protective coating of grease to the mounting hole(s) and underside of the vehicle where bare metal is exposed to prevent corrosion. **Failure to follow this procedure will void warranty of certain electrical components**.

❑ **Lift Installation Checklist**

A generic **Lift Installation Checklist** is provided as a final installation checklist to be given to your customer. This checklist is the last page in this manual. Complete, remove (tear out) and forward the Lift Installation Checklist (or a copy) to your customer to confirm that this lift has been properly installed.

❑ **Preventive Maintenance Checklist**

A generic **Daily Preventive Maintenance Checklist** is provided in this manual (next to last page) for your transit agency's use. The form can be tailored to your particular application.

Lift Installation Instructions

Installation Parts

Please check the Installation Parts List and Tools List to see that you have everything needed to begin. Report any missing items.

			Part Number	
Item	**Qty.**	**Description**	**12 Volt**	**24 Volt**
	1	Installation Parts Package (complete) Includes all following items	25853A-A4	26155A-A4
1	2	Bracket, Underfloor, Reinforcement	25915	25915
	1	Small Parts Package (Bag) **only** (includes items 2-17 **only**)	25926A	25926A
2	2	Bolt, 3/8"-16 x 8" Hex Tap (Full Thread)	10778	10778
3	8	Bolt, 3/8"-16 x 4" Carriage	23977	23977
4	1	Bolt, 3/8"-16 x 1" Hex	10025	10025
5	8	Washer, 2.469" O.D. x .5" I.D., Flat	13342	13342
6	14	Washer, 3/8" Flat	10064	10064
7	4	Washer, 3/8" Lock	10069	10069
8	8	Washer, 3/8" External Tooth Star	25844	25844
9	10	Nut, 3/8"-16 Hex	10059	10059
10	18	Screw, #8-18 x 1/2" Hex, Self-Tap	10383	10383
11	6	Screw, #8-18 x 1" Hex, Self-Tap	10084	10084
12	10	Clip, Cable, 7/16" Diameter Plastic	15777	15777
13	5	Cable Tie, 11" Solid	10091	10091
14	1	Grommet, Plastic	205-2001	205-2001
15	1	Terminal, Battery Cable, 1/4" eye	13865	13865
16	1	Boot, Rubber, Battery Cable	82046	82046
17	1	Spacer, 13/32" I.D. x 1/2" *See Circuit Sentry Installation*	13050	13050
18	1	Circuit Sentry Assembly *See Circuit Sentry Installation*	18189A	18190A
19	1	Plastic, Flat 1/8" x 4" x 4" *See Circuit Sentry Installation*	12764	12764
20	1	Lead Wire - 30"	13362A	13362A
21	1	Control Box Holder Assembly Includes:	17019A	17019A
22	1	Plate, Back	16988	16988
23	1	Bracket, Switchbox Clip	16954	16954
24	2	Decal, Courtesy Requested	12375	12375
25	1	Decal, Warnings/Operating Instructions	25859	25859
26	1	Decal, Instructions, ADA (Standee/Interlock)	19342	19342
27	1	Video, Commercial Lift Operation	23554	23554
28	1	Manual, Installation/Service	25522-05	25522-05
29	2	Grip, Handrail, Yellow	19074	19074

Power Cable and Base Plate Wedges: These items fastened to the lift platform during shipment.

Tools Required

- Pencil
- Tape measure
- Framing square
- Hammer
- Center punch
- Wire stripper/Utility knife
- 3/8" Capacity drill
- 1/8" Diameter drill bit
- 3/8" Diameter drill bit
- 9/16" Wrenches and/or socket
- 1-1/8" Diameter hole saw
- 1/4" Hex nut driver bit or
- 1/4" socket/wrench
- Ratchet-style wrench

Lift Installation Instructions

See **Chassis Ground Notice** on page 17 **before** installing mounting bolts.

Figure A

Position star washers and underfloor mounting hardware as specified (per chassis and floor configuration).

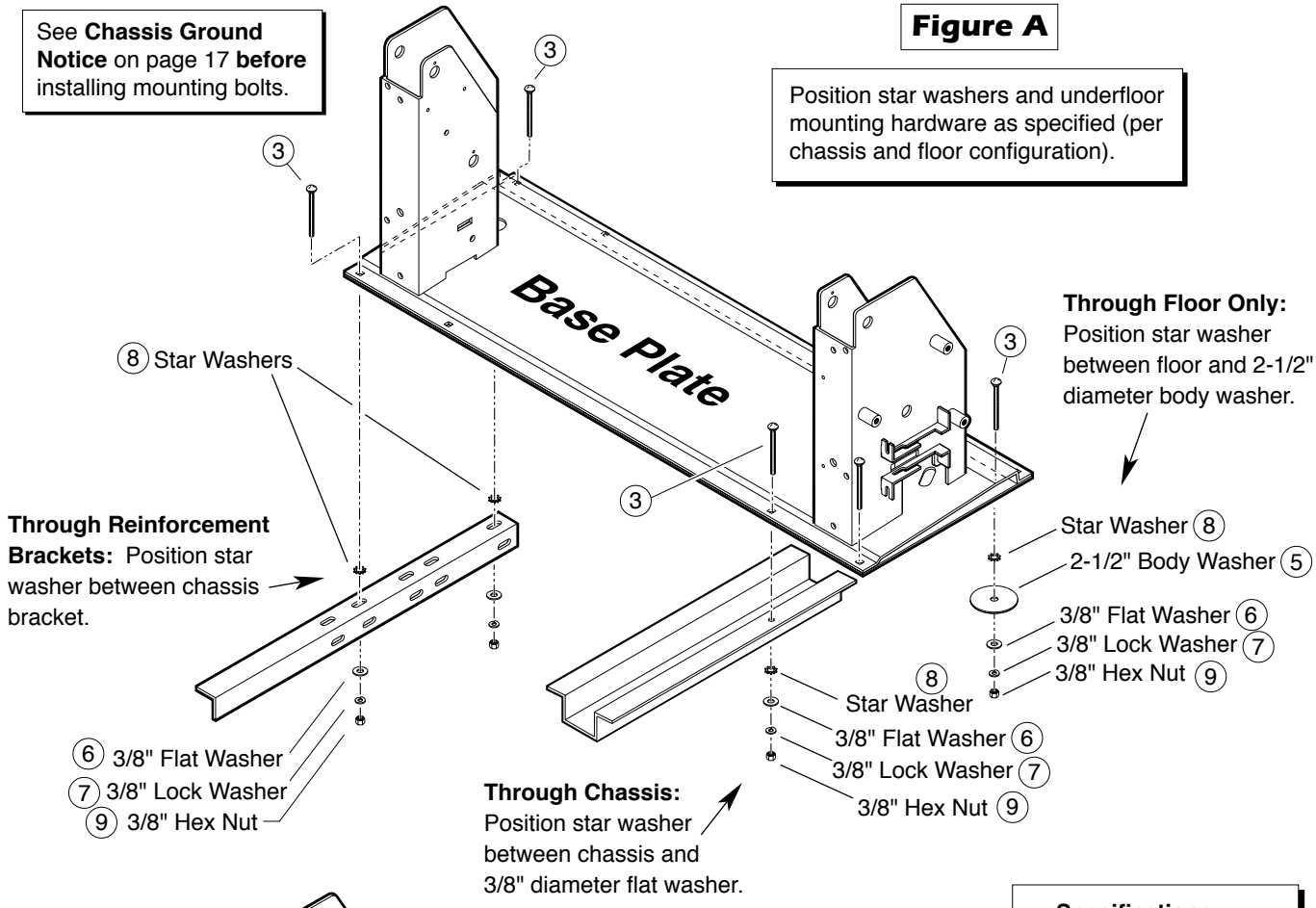
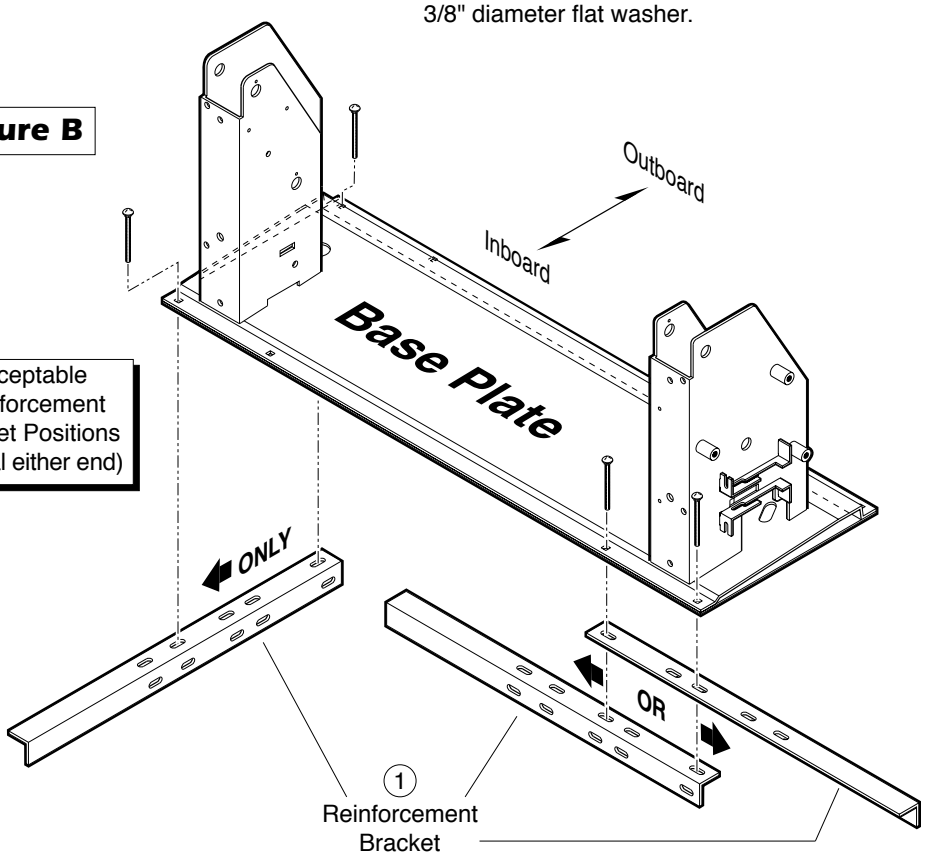

3
3
Base Plate
8 Star Washers
3
3
Through Floor Only: Position star washer between floor and 2-1/2" diameter body washer.
Star Washer 8
2-1/2" Body Washer 5
3/8" Flat Washer 6
3/8" Lock Washer 7
3/8" Hex Nut 9
Through Reinforcement Brackets: Position star washer between chassis bracket.
6 3/8" Flat Washer
7 3/8" Lock Washer
9 3/8" Hex Nut
8 Star Washer
3/8" Flat Washer 6
3/8" Lock Washer 7
3/8" Hex Nut 9
Through Chassis: Position star washer between chassis and 3/8" diameter flat washer.

Figure B



Acceptable Reinforcement Bracket Positions (typical either end)

Specifications:

- Eight 3/8"-16 x 4" carriage bolts (or 8" bolts) must secure base plate through floor.
- One reinforcement bracket must secure base plate below floor at both ends (unless inboard mounting bolts penetrate chassis).
- Two mounting bolts must secure each reinforcement bracket.
- One 3/8" star washer, one 3/8" flat washer, one 3/8" lock washer and one 3/8" nut must secure each base plate mounting bolt below floor as specified in Figure A.
- Mounting Bolt Torque Specifications: 28 to 31 foot pounds.

Lift Installation Instructions

Note: Read **all** Pre-Installation Notes **prior** to installation.

1 Lift Positioning

⚠WARNING

Install lift and power platform to fully folded position before removing shipping straps. Failure to do so may result in serious bodily injury and/or property damage.

⚠WARNING

When positioning the lift:
- **lift must remain folded (vertical)**
- **minimum three people required if hoist is unavailable**

Failure to follow these rules may result in serious bodily injury and/or property damage.

⚠WARNING

Do not fold or unfold the platform prior to positive securement of base plate mounting hardware. Failure to follow this rule may result in serious bodily injury and/or property damage.

The lift towers (upright supports) and the vertical arms **must** be parallel (aligned) with the vertical sides of the door jamb and should be perpendicular (90˚) to the vehicle floor.

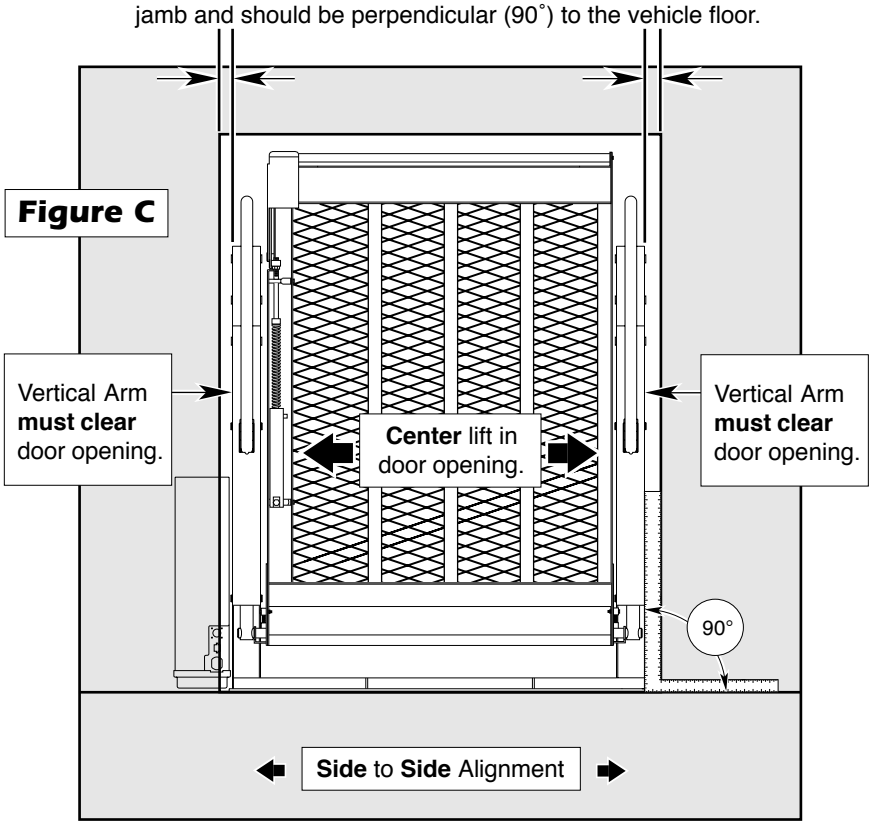

Vertical Arm **must clear** door opening.
Center lift in door opening.
Vertical Arm **must clear** door opening.
90°
Side to **Side** Alignment

Figure C

Plastic straps secure the lift in the stowed position during shipment. **Before removing the shipping straps,** install the lift and power the platform to the fully folded position (press IN switch).

With the unit remaining in the fully folded position, **carefully** place the lift in the vehicle (use hoist or crane).

Position base plate parallel (aligned) with side of vehicle (door sill or stepwell).

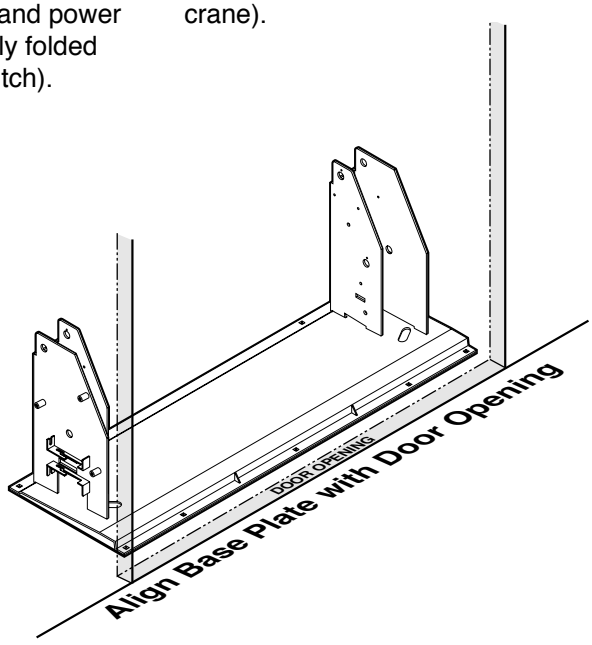


Figure D

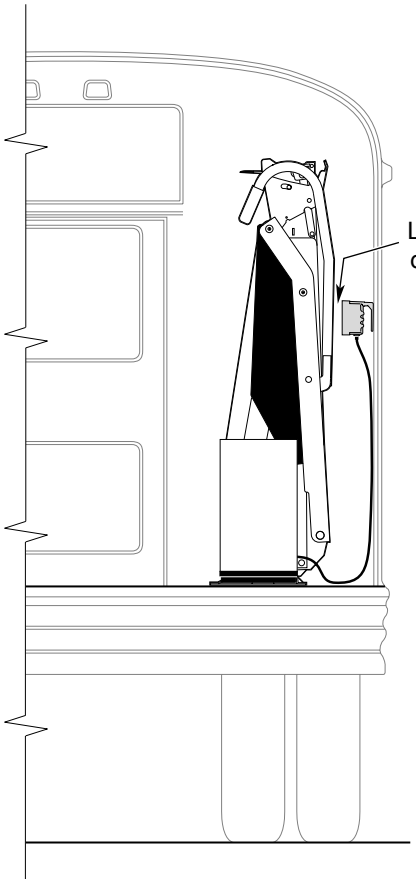


Figure E

Control Box Note: The lift control box mounts to the inside face of the lift door as shown in Figure E. Allow control box clearance. Control box installation details are provided on pages 20 and 21.

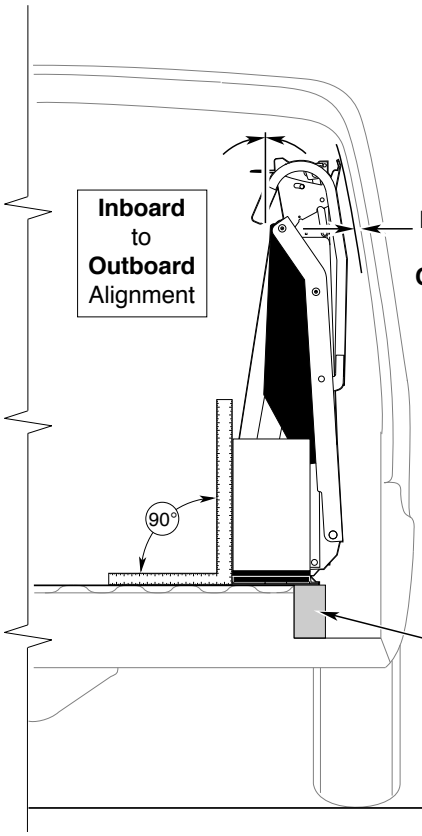

Inboard to Outboard Alignment
Minimum 1/2" Clearance
90°
Stepwell Installations: It is **Not Permissible** for the base plate to overhang an **open** stepwell. Details at right.

Figure F

The lift vertical arms and parallel arms **must be parallel (aligned) to each other**. The lift towers should be perpendicular (90˚) to the vehicle floor (**except when base plate shims are used**).

Clearance:

Visually **center the unit in the opening**. Position the base plate parallel to (aligned with) the vehicle lift door sill or stepwell as shown in Figure D. Close the vehicle door(s). From inside, position the unit as close to the door opening as possible while maintaining a **minimum clearance** of **1/2"** between the nearest point on the lift and the door or door latch. See Figures E and F.

Alignment:

Side to Side Alignment: As viewed from outside the vehicle, the lift vertical arms and platform should be perpendicular (90°) to the vehicle floor and parallel (aligned) with the vertical sides of door jamb. The vertical arms and the parallel arms **must** clear the door opening when the lift folds and unfolds. See Figure C on previous page.

Inboard to Outboard Alignment: When viewed from "pump side" to "opposite pump side," the vertical arms and parallel arms **must** be aligned and parallel to each other. See Figure F. The lift towers should be perpendicular (90°) to the vehicle floor **except when base plate shims are used** (details on page 12).

Stepwell Installations: When installing an L915 Series lift in the side cargo door (with stepwell), it is **not permissible** for the base plate to overhang the stepwell.

Additional base plate support **must** be constructed in the stepwell for lift support if the base plate overhangs the open stepwell. The structure **must** be level with the existing floor and of equivalent construction (structural strength).

1 **Lift Positioning** (continued)

Rear Door and Extensive Floor-to-Ground Installations:

Position the lift in the rear door opening as outlined on page 11. Depending on the particular lift model installed and the particular vehicle configuration, the top of the lift **may** need to be tilted inboard slightly to provide the **minimum 1/2" clearance** between the lift and the door(s) and/or to increase platform and vertical arm kick-out (to provide adequate clearance between lift and vehicle). See Figure G.

There must be a **minimum 1" clearance between the lift** (vertical arms and/or automatic inboard roll stop) **and the vehicle** during lift operation.

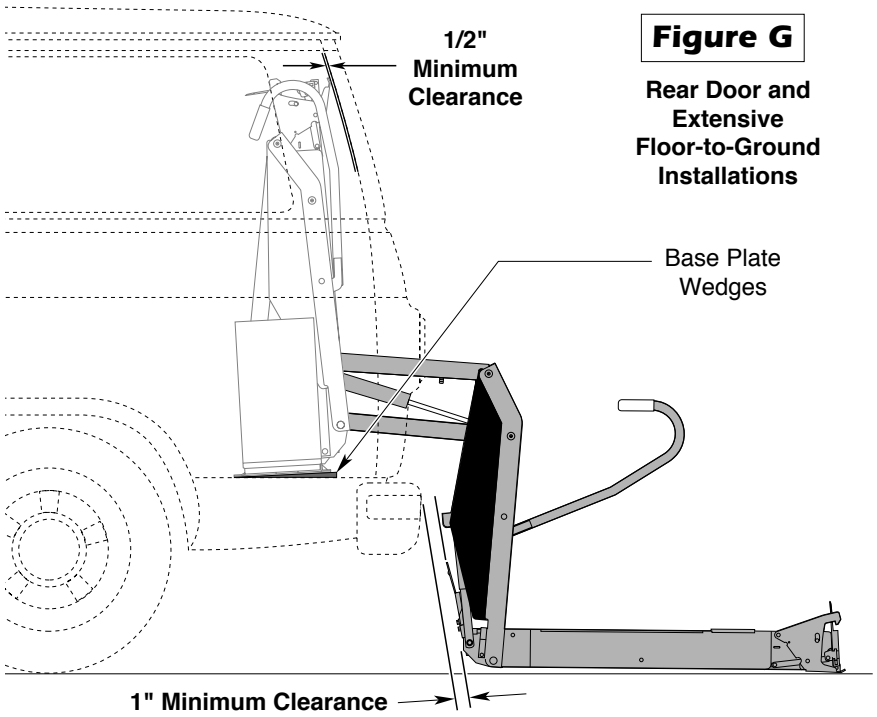


Figure G

Rear Door and Extensive Floor-to-Ground Installations

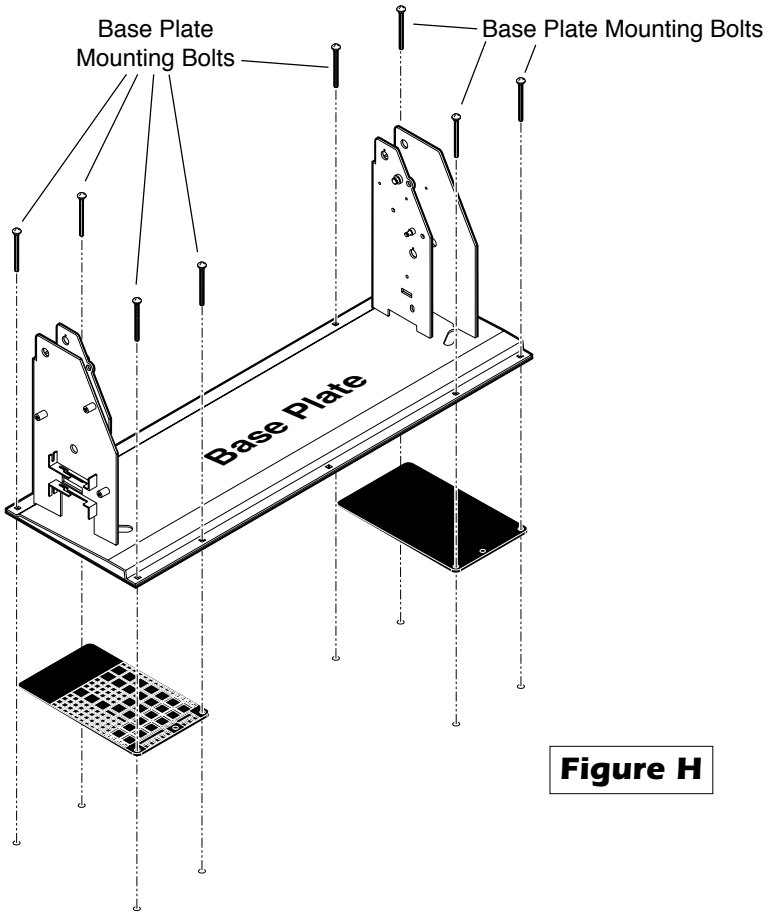


Figure H

Base Plate Wedges:

Four base plate wedges are supplied for shimming (tilting lift). The plastic wedges provide full depth base plate support. Use one or two wedges per base plate end as needed. Position the wedges by aligning the mounting holes in the wedges with the base plate mounting holes as shown in Figure H.

⚠WARNING

Check for obstructions such as gas lines, wires, exhaust, etc. before drilling or cutting. Failure to do so may result in serious bodily injury and/or property damage.

2 Lift Securement

Base Plate Mounting

There **must be a total of eight** 3/8"-16 x 4" carriage bolts (**or** 8" bolts) **securing the base plate through the floor**. Two 3/8"-16 x 8" bolts are supplied for bolting through vehicle floor framing members if applicable.

Optimum Bolt Locations: The mounting bolts **must** be inserted in the mounting holes provided in the base plate. Locate mounting bolts as shown in Figure I (straddling the towers). The holes are positioned straddling the towers in order to minimize **vertical upright deflection** (details on page 16).

Read warning on opposite page. Check under the vehicle for possible obstructions such as fuel tanks, heat shields, fuel lines, wires, exhaust, framing members, etc. **Carefully** drill eight 3/8" diameter mounting holes through the vehicle floor in alignment with the base plate mounting holes.

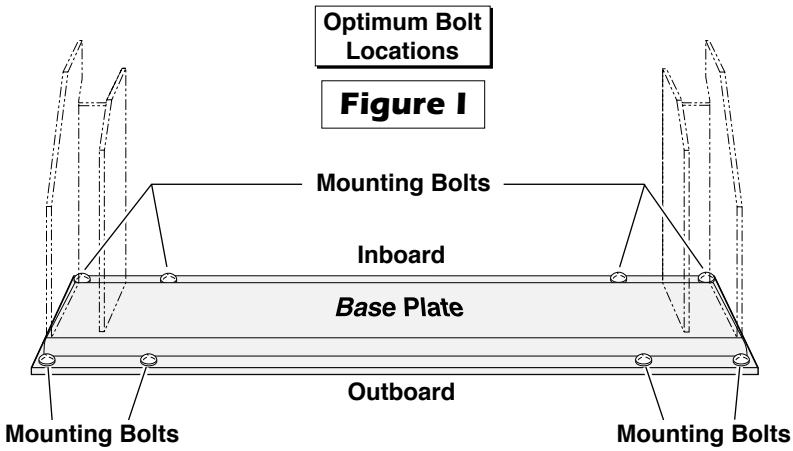


Figure I

Base Plate Wedges: When base plate wedges are used, the outboard mounting bolts must must be inserted through the mounting holes in the wedges (2 per wedge). See Figure H on page 12.

Underfloor Reinforcement Brackets

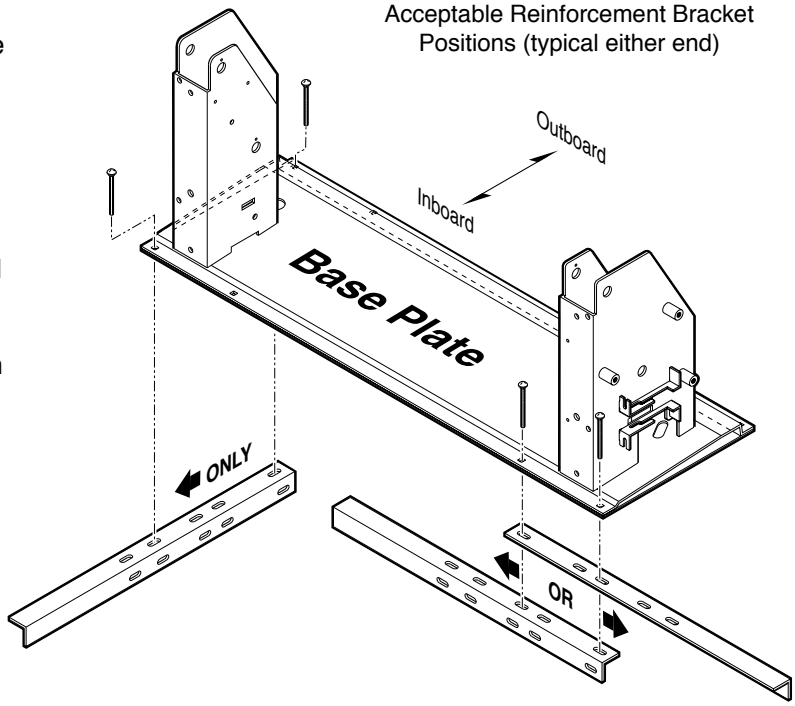
Two underfloor reinforcement brackets are supplied. One reinforcement bracket must be used to secure the base plate below the floor at both ends of the base plate (unless inboard base plate mounting bolts penetrate vehicle chassis subframe members).

OEM van floors are becoming lighter in an effort to improve weight and fuel efficiency. 1/2" marine grade plywood subfloor is recommended for use between the lift base plate and the van floor. Extend the plywood as far as possible beyond the base plate footprint to reach key van floor support points. The mounting surface must be even and level.

Underfloor reinforcement brackets can be positioned facing inboard, left or right as shown in Figure J. The spacing of the reinforcement bracket mounting holes matches the mounting hole spacing of the lift base plate (two standard size base plates). **Two base plate mounting bolts must secure each bracket**.

Figure J

Acceptable Reinforcement Bracket Positions (typical either end)



2 **Lift Securement** (continued)

Underfloor Reinforcement Brackets (continued)

Two base plate mounting bolts must secure each bracket.

Underfloor reinforcement brackets **must reach and overlap the nearest subframe member flange** (see Figures J and K). Cut the "L" bars to length.

Technical Assistance: If the reinforcement brackets will not work as detailed for your particular installation, call 1-800-THE LIFT for technical assistance. If the base plate mounting holes cannot be used in your application, call for technical assistance. Underfloor vehicle configuration data is available for Ford, Chevy/GMC and Dodge vans (not available for all applications).

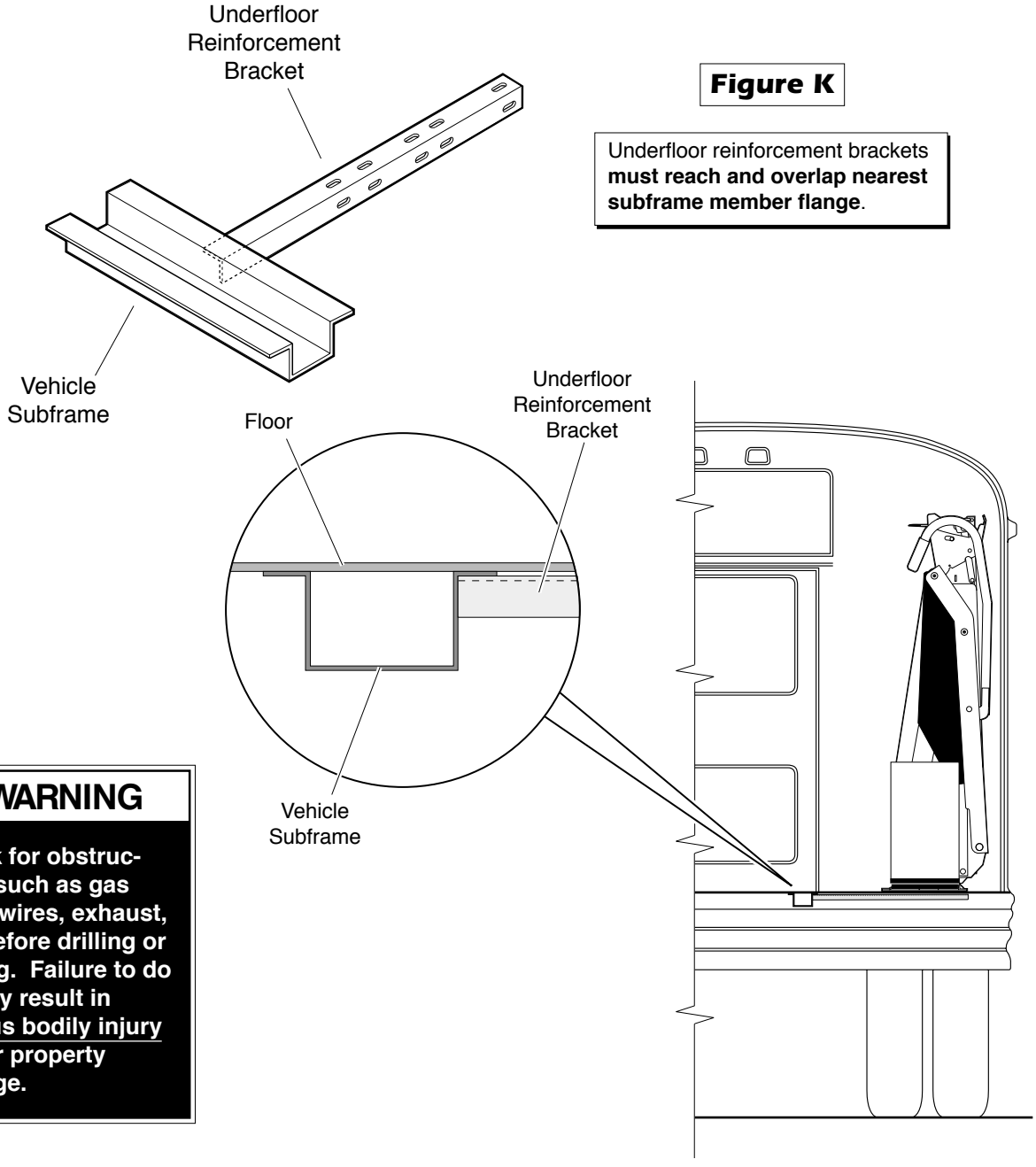


Figure K

Underfloor reinforcement brackets **must reach and overlap nearest subframe member flange**.

⚠WARNING

Check for obstructions such as gas lines, wires, exhaust, etc. before drilling or cutting. Failure to do so may result in serious bodily injury and/or property damage.

External Tooth Star Washers

In an effort to provide maximum ground to the lift system, eight 3/8" external tooth star washers are supplied with each lift. Position star washers as follows. **Note:** See **External Ground Cable** and **Chassis Ground Notice** at right before installing mounting bolts.

Through Floor Only: When base plate mounting holes penetrate the floor only, position a star washer between the floor and the 2-1/2" diameter body washer as shown below.

Through Reinforcement Brackets: When reinforcement bars are used, position the star washer between the chassis and the bar (see Figure L).

Through Chassis: When securing base plate mounting bolts through chassis subframe members, position a star washer between the chassis and the 3/8" diameter flat washer (see Figure L).

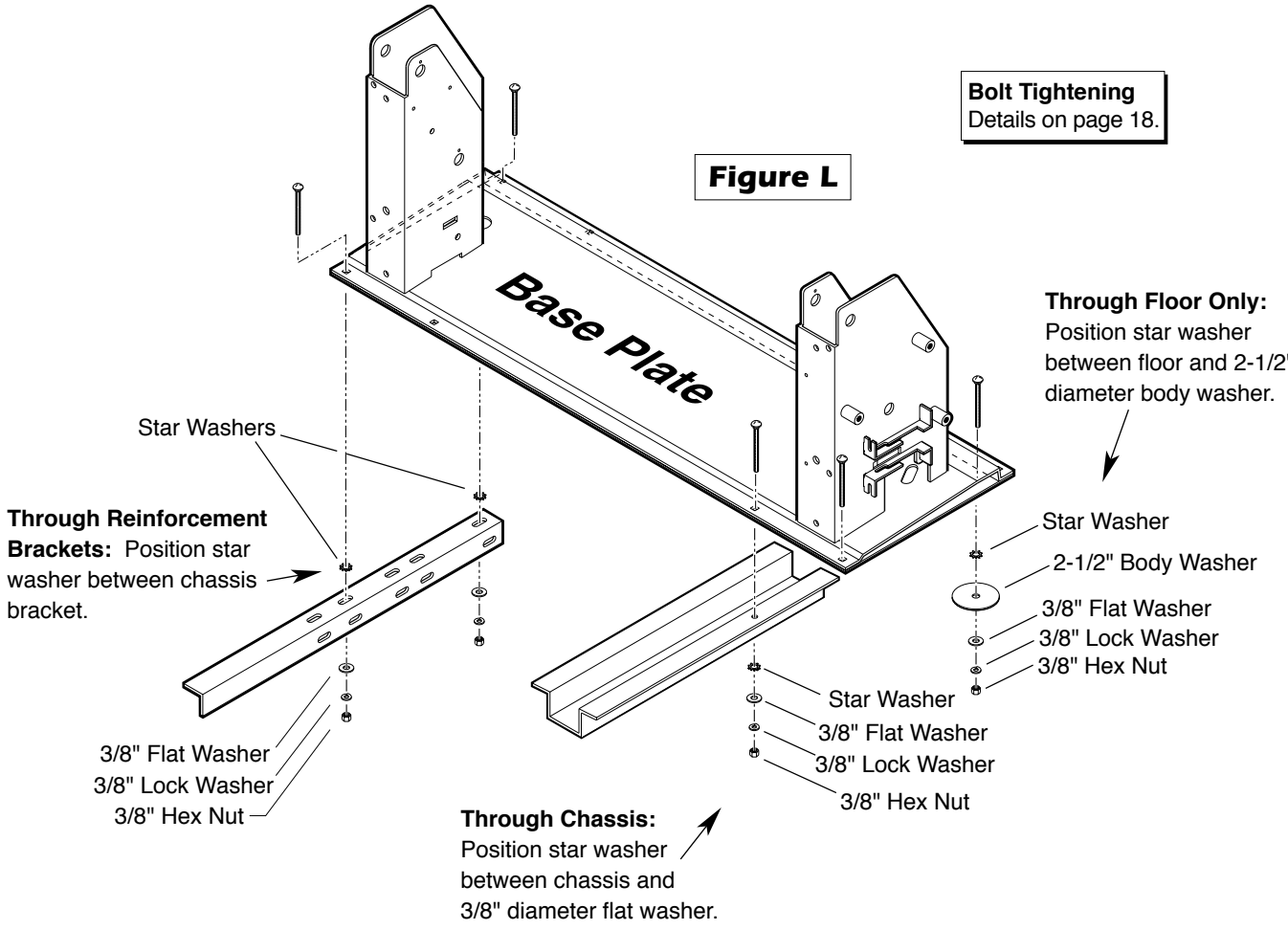
Note: Body washers are not required when underfloor brackets are used or bolts penetrate chassis subframe members.

External Ground Cable: L915 pump modules feature an external ground cable. Route the external ground cable through the floor grommet (details on page 17 of this manual). Secure the ground cable below the floor with one of the base plate mounting bolts. Use of the star washers, the external ground cable, and following the chassis ground procedures outlined below will provide **optimum ground.**

Chassis Ground Notice: Remove (grind, sand, etc.) powder coating (paint) from the area around one or more lift base plate mounting hole(s) and remove any undercoating, dirt, rust, etc. from the underside of the vehicle floor metal surface equal in size to the mounting hardware in order to provide **optimum ground** to the electrical system. Apply a protective coating of grease to the mounting hole(s) and underside of the vehicle where bare metal is exposed to prevent corrosion. **Failure to do so will void warranty of certain electrical components**.

Bolt Tightening
Details on page 18.

Figure L


Base Plate
Star Washers
Through Reinforcement Brackets: Position star washer between chassis bracket.
3/8" Flat Washer
3/8" Lock Washer
3/8" Hex Nut
Through Chassis: Position star washer between chassis and 3/8" diameter flat washer.
Star Washer
3/8" Flat Washer
3/8" Lock Washer
3/8" Hex Nut
Through Floor Only: Position star washer between floor and 2-1/2" diameter body washer.
Star Washer
2-1/2" Body Washer
3/8" Flat Washer
3/8" Lock Washer
3/8" Hex Nut

2 **Lift Securement** (continued)

Bolt Tightening

Tightening of the base plate mounting bolts directly affects vertical arm alignment and base plate warpage. Tighten inside mounting bolts first, then tighten outside mounting bolts. Measure alignment of towers and vertical arms while tightening. See Figure M. **Note:** Towers must be aligned and parallel, with platform securely nested in the rubber bumpers. See Photos A and B.

Mounting Bolt Torque Specifications: 28 to 31 foot pounds. Adjustment to mounting bolt torque may be required to achieve proper alignment.

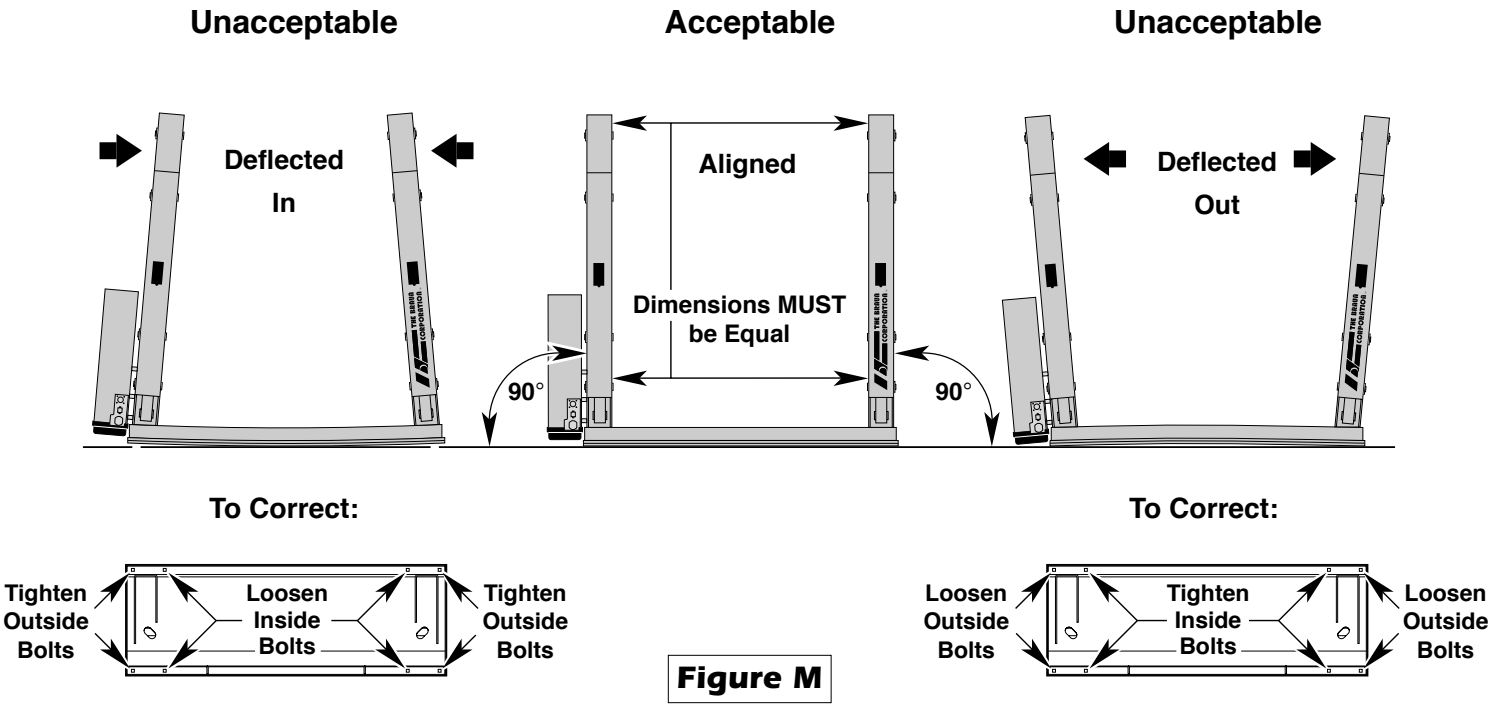
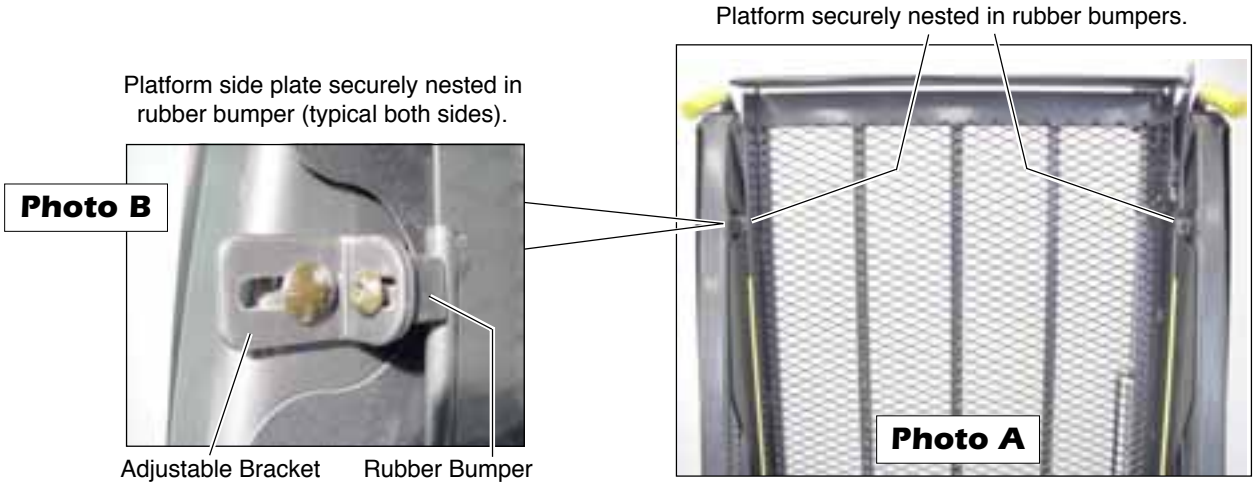


Figure M

Side-to-Side Alignment


Platform securely nested in rubber bumpers.
Platform side plate securely nested in rubber bumper (typical both sides).
Photo B
Photo A
Adjustable Bracket
Rubber Bumper

3 Power Cable and Ground Cable Installation

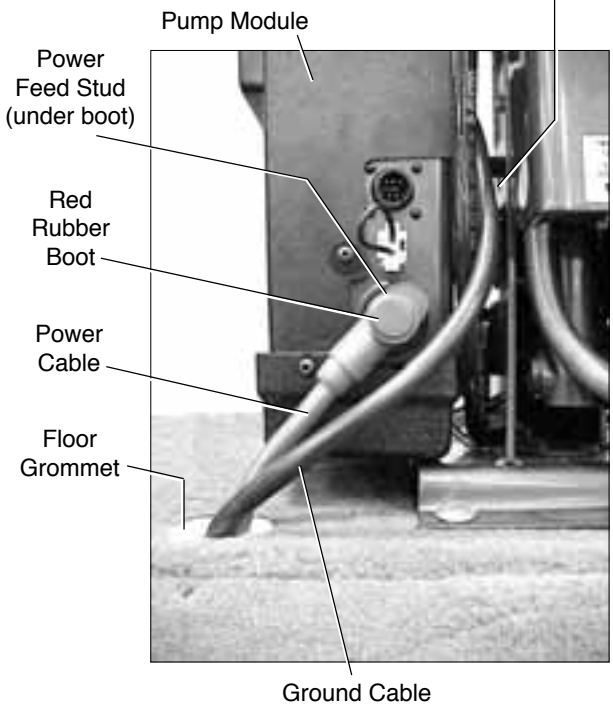
L915 pump modules feature an external stud for connection of the lift power cable and an external ground cable. A 1" I.D. plastic grommet is provided for the power cable and ground cable access hole. Install grommet, ground cable and power cable as outlined.

⚠CAUTION

Position and secure ground cable clear of lift operation.

Floor Grommet:

Check under the vehicle to determine where the **optimum** power cable access can be gained with **minimum** obstructions. The recommended grommet location is through the floor (pump side) approximately two to three inches from the base plate as shown.



⚠WARNING

Check for obstructions such as gas lines, wires, exhaust, etc. before drilling or cutting. Failure to do so may result in serious bodily injury and/or property damage.

Use the 1-1/8" diameter hole saw to drill the grommet access hole. Insert the grommet in the hole. Use two self-tap screws to secure the plastic grommet.

Ground Cable:

Route the external ground cable through the floor grommet. **Secure the ground cable below the floor with one of the base plate mounting bolts**. Place the ground cable terminal on the mounting bolt sandwiched between the star washer and the 3/8" flat washer (except when 2-1/2" diameter body washers are used). Position the terminal between the 3/8" flat washer and the 2-1/2" diameter washer when applicable. See Figure L on page 15.

⚠CAUTION

Position and secure ground cable clear of lift operation.

Power Cable:

A red rubber boot is supplied in the installation package to insulate the power cable connection. Slip the boot onto the power cable end (with terminal). Remove the 3/8" hex nut and star washer from the external power feed stud. Place the power cable terminal onto the stud and secure with the star washer and nut. **Tighten securely**. Position the rubber boot over the cable end.

Locate the vehicle battery pack. Route the 37' power cable through the grommet to the battery location (details on pages 18 and 19).

⚠WARNING

Route power cable clear of exhaust system, other hot areas and moving parts. Failure to do so may result in serious bodily injury and/or property damage.

3 **Power Cable and Ground Cable Installation** (continued)

Power Cable (continued)**:**

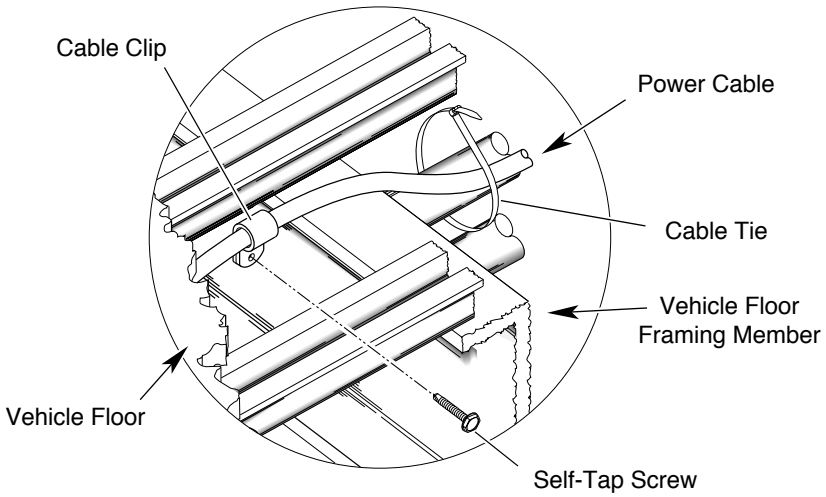
Route the power cable through an existing vehicle access hole at the battery pack location. **Route power cable clear of exhaust, other hot areas and moving parts.** Cut the lift cable to the necessary length, (it **must reach to within 24" of the battery**). Strip 1/2" of insulation from the cable end and crimp the 1/4" diameter terminal onto the cable **securely** (item 11 - Figure P).

⚠WARNING

Route power cable clear of exhaust system, other hot areas and moving parts. Failure to do so may result in serious bodily injury and/or property damage.

Note: Route, cut to length and connect the power cable **before** securing the cable to the vehicle.

Figure O

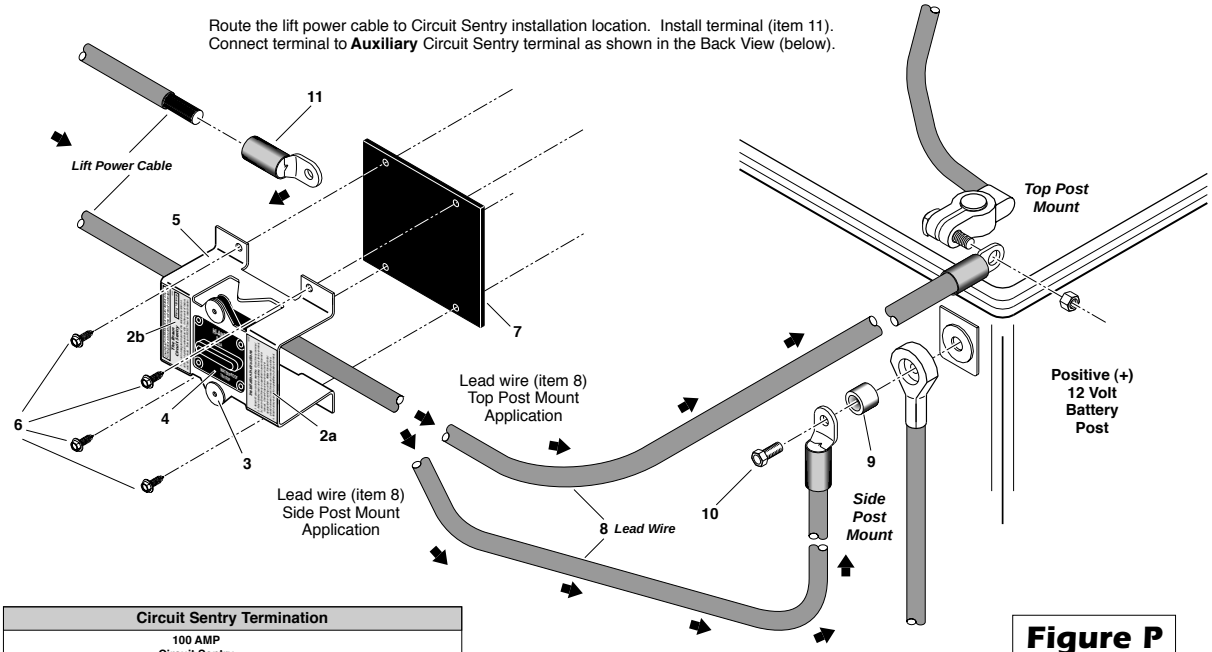


4 Circuit Sentry Installation and Power Connection

Item	Qty.	Part No.	Description	Item	Qty.	Part No.	Description
1	1	18189A	Circuit Sentry Bkt. Assy. *includes:*	6	4	10383	Screw, #8-18 x 1/2" Self-Tap
2a	1	18180	• *Decal, Installation Instructions*	7	1	12764	Plastic, Flat,1/8" x 4" x 4"
2b	1	18181	• *Decal, 100 A Circuit Sentry Label*	8	1	13362A	Lead Wire, #2 Ga. x 30"
3	2	10377	• *Rivet, Pop, 3/16" x 5/8"*	9	1	13050	Spacer, 13/32" x 1/2"
*	2	11541	* *Washer, #10 Flat*	10	1	10025	Bolt, 3/8"-16 x 1" Hex
4	1	18178	• *Circuit Breaker, 100 A*	11	1	13865	Terminal, 1/4" Eye
5	1	18138	• *Bracket, Circuit Sentry*				

** Indicates items not shown*

Route the lift power cable to Circuit Sentry installation location. Install terminal (item 11). Connect terminal to **Auxiliary** Circuit Sentry terminal as shown in the Back View (below).



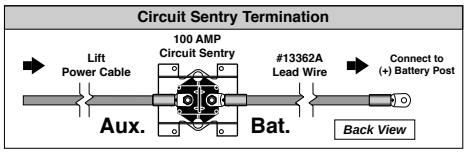
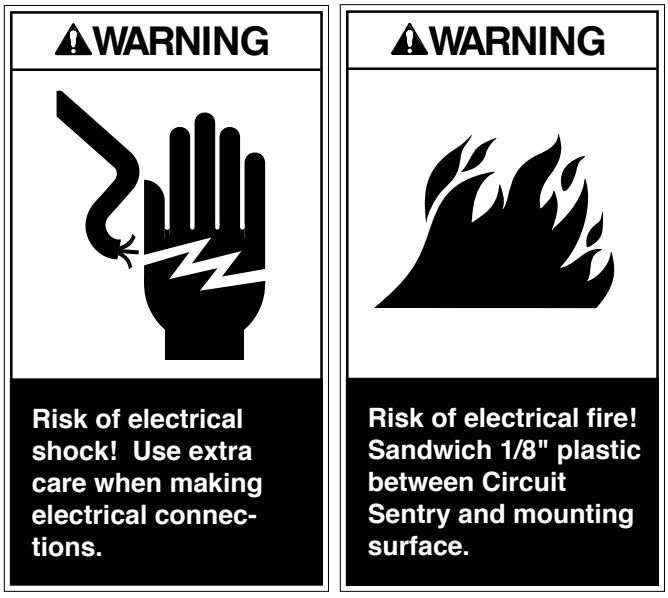


Figure P

Note: *Circuit Sentry #18190A is supplied for* ***24 Volt*** *Applications.*


⚠WARNING
Risk of electrical shock! Use extra care when making electrical connections.
⚠WARNING
Risk of electrical fire! Sandwich 1/8" plastic between Circuit Sentry and mounting surface.

Attach the power cable to the **Auxiliary** terminal of the circuit sentry as shown. Attach one end of the 30" lead wire (item 8 above) to the **Battery** circuit sentry terminal. Locate the circuit sentry within 24" of the positive (+) battery terminal and use self-tap screws to fasten it to the fenderwell or other appropriate mounting surface as shown. **Important:** Sandwich the 1/8" x 4" x 4" plastic between the circuit sentry and the mounting surface to prevent electrical short circuits.

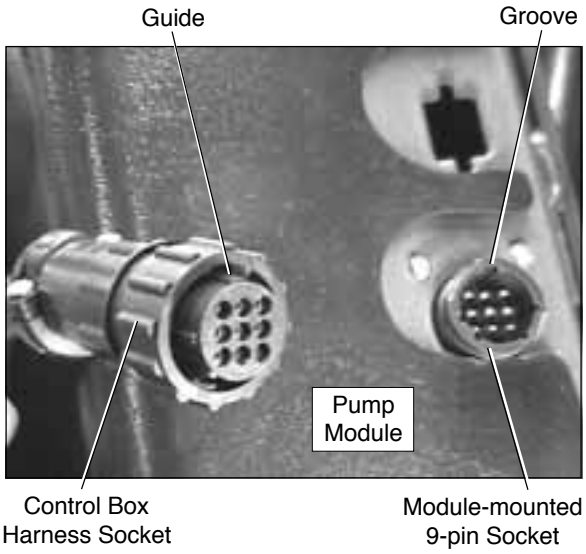
Note: A 3/8"-16 x 1" bolt and 13/32" I.D. spacer are provided for side terminal mount batteries. Install as shown.

Carefully connect the opposite end of the 30" lead wire to the **Positive** (+) post of the battery.

Use cable ties and/or 7/16" cable clips and self-tap screws to secure the cable to the underside of the vehicle (shown in Figure O).

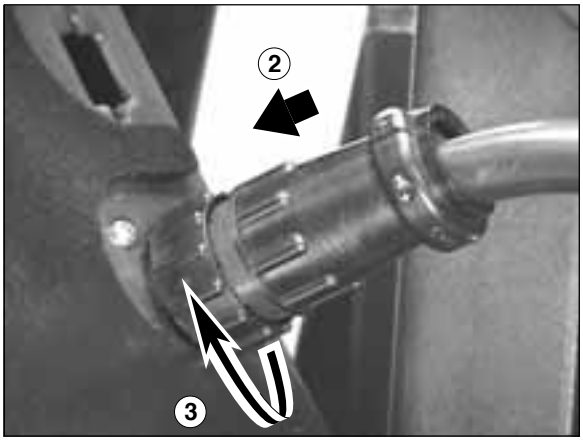
5 Control Box and Harness Installation

Quick-Disconnect Harness: "Quick-disconnect" hand-held controls are available with four types of cable (standard, armored and coiled). L915 Series lifts are shipped without the control box harness installed. All harnesses are equipped with the same quick-disconnect sockets. Remove the control box and harness from their packing and connect as stated below.



Harness Installation (Connect) Instructions

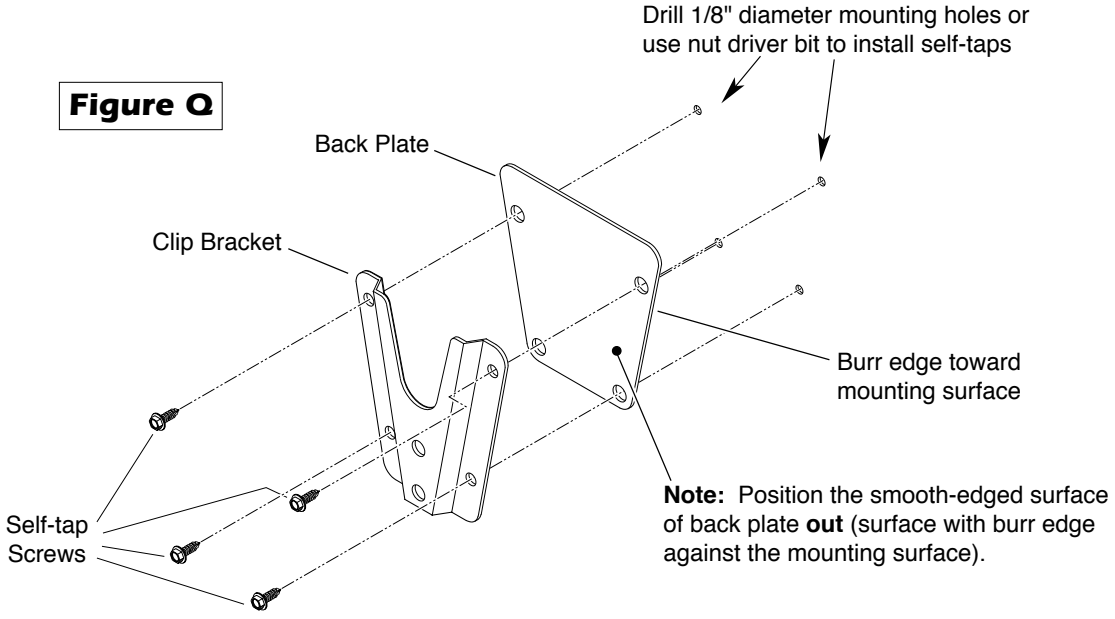
1. Align control box harness socket guides with pump module socket grooves (will only connect one way).
2. **Carefully** insert control box harness socket in module socket.
3. Turn control harness socket **inside** knurled grip clockwise fully.



Harness Removal (Disconnect) Instructions

Reverse Steps 2 and 3 above.

Figure Q


Drill 1/8" diameter mounting holes or use nut driver bit to install self-taps
Back Plate
Clip Bracket
Burr edge toward mounting surface
Self-tap Screws
Note: Position the smooth-edged surface of back plate out (surface with burr edge against the mounting surface).

Control Box Mounting: The control box mounts to the inside face of the lift cargo door as shown in the center photo below. Mounting location varies depending on lift and vehicle door applications. **Note:** Close the vehicle door and select a mounting location for the control box (**prior to fastening hardware**) to be certain the control box **does not** contact the lift. See Figure E on page 11.

Use four #8-18 x 1/2" self-tap screws to mount the control box holder back plate and the switch box storage clip bracket to the door as shown in Figure Q on page 20. Insert control box storage clip in holder assembly.

Control Box Storage Clip Breakage Note: Position the smooth-edged surface of the back plate **out** (surface with burr edge against the mounting surface). One surface of the plate may have a slight burr on the edge (due to machining) which prohibits smooth removal and storage of the switch box.

Harness Routing and Securement: Control box cable routing and securement varies according to the application. **Route and secure cable clear of potential door and lift damage!**

Door opens to "Pump Side:" Route the control box cable out to the interior face of the door. There must be enough free cable to allow attendant usage. The cable **must be fastened securely to vehicle wall and the door with just enough slack cable to allow the door to open.**

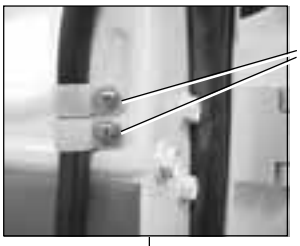
⚠CAUTION

Excess slack cable between vehicle wall and door may result in cable damage.

Excess slack cable between the wall and the door could allow the cable to be pinched in the door jamb when the door is closed. **Failure to follow this procedure may result in cable damage.**

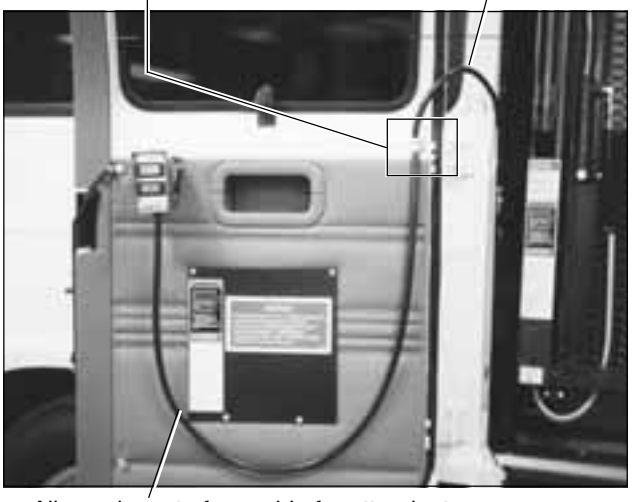
Use #8-18 x 1/2" self-tap screws and 7/16" cable clips to fasten the cable to the door as shown in top photo. Fasten the cable to vehicle wall using #8-18 x 1/2" self-tap screws and 7/16" cable clips.

Door opens to "Opposite Pump Side:" Route the control box cable alongside the outboard edge of the lift base plate (between base plate and door sill) and out to the interior face of the door as shown in bottom photo. Secure cable to door as outlined above.

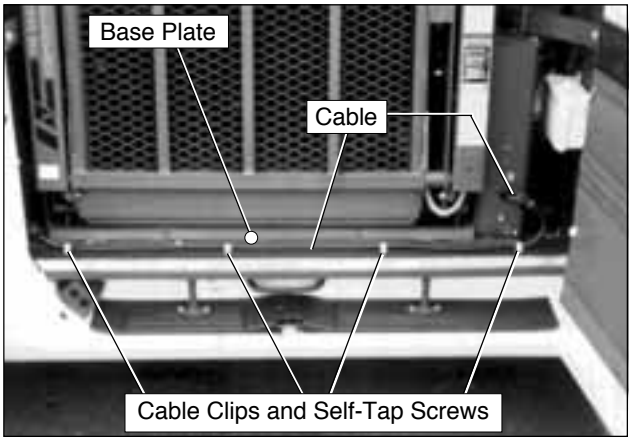


Use #8-18 x 1/2" self-tap screws and 7/16" cable clips to secure the cable to the door.

Excess cable between wall and door **may result in cable damage**.



Allow adequate free cable for attendant usage.



Design Lifting Capacity

Millennium Series lifts are rated at a design lifting capacity of 800 pounds. The combination of lift base plate, mounting bolts, underfloor reinforcement bars and the vehicle floor/chassis configuration **must support the lift and the lift load**.

Note: Visually check alignment of towers and vertical arms while testing lift operation. Refer to the **Positioning and Clearance Checklist** and corresponding illustrations. **Note:** Refer to the **Bolt Tightening** section and Figure M on page 16 also. Adjust tightness of mounting hardware to maintain proper alignment.

6 Test Lift Operation

Open the door(s) **fully**, stand clear and press the orange UNFOLD switch. Observe all points of the lift as it unfolds to be **certain** that the lift **does not contact** the door opening. If any contact occurs, the lift **must be repositioned**.

Press the red DOWN switch to lower the platform. There must be a **minimum 1" clearance** between the lift and the vehicle as the platform lowers. The lift **must be repositioned** if there is not a **minimum 1" clearance**.

Review the **Positioning and Clearance Checklist**. **Be certain** the lift is properly positioned and clearance is adequate. The **lift must be repositioned if any contact occurs!**

Repositioning: Loosen or remove mounting hardware and **carefully reposition the lift if needed** to meet the positioning and clearance specifications.

Then, bolt the lift in position as detailed in Step 2.

Review lift securement details in Step 2 to ensure the lift is properly mounted.

Note the angle of the platform when it reaches ground level. **Platform angle must** be properly adjusted. Follow the **Platform Angle Adjustment Instructions** on pages 26 and 27 to achieve the proper platform angle.

☑ Positioning and Clearance Checklist

Vehicle Clearance:

- ☐ Vertical arms and parallel arms **must** clear door opening (vertical sides) as lift unfolds and folds (see points 1 and 2).
- ☐ Parallel arms (bottom side) **must** clear door sill when lift is fully lowered (see point 3).
- ☐ There **must** be **minimum 1/8" clearance** between deployed bridge plate and any obstruction on vehicle floor (see point 4).
- ☐ There **must** be 1/2" clearance between the lift and the vehicle door(s) when the platform is completely folded (see point 5).
- ☐ Lift **must** clear door-mounted control box when door is closed (see point 6).
- ☐ The lift **must** clear vehicle by **minimum 1"** (see point 7).

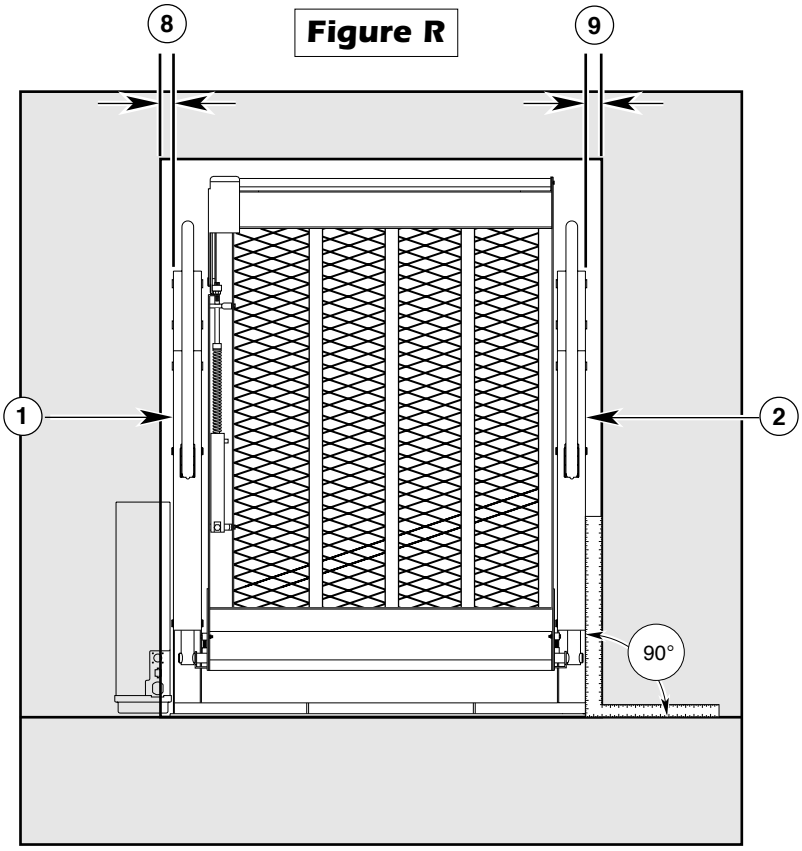
☑ Positioning and Clearance Checklist

Alignment:

☐ **"Side" to "Side" Alignment:**
As viewed from outside the vehicle, the lift vertical arms and platform (when stowed) should be perpendicular (90°) to the vehicle floor and parallel (aligned) with the sides of door jamb (see points 8 and 9).

☐ **"Inboard" to "Outboard" Alignment:**
The vertical arms and parallel arms **must** be aligned (parallel) to each other (see point 10). The towers should be perpendicular (90°) to the vehicle floor **except when base plate shims are used** (see point 11).

Figure R



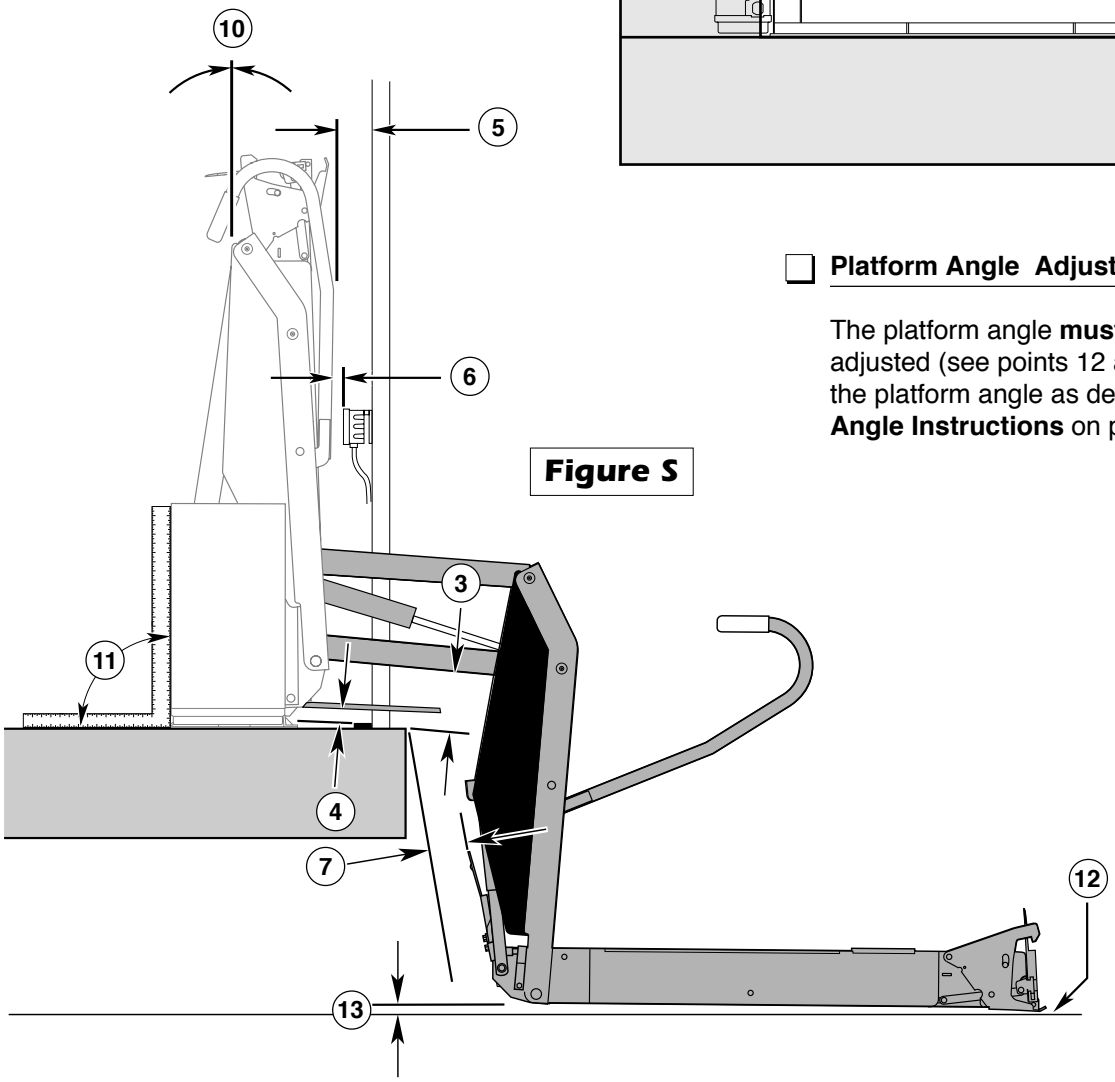


Figure S

☐ **Platform Angle Adjustment:**

The platform angle **must** be properly adjusted (see points 12 and 13). Adjust the platform angle as detailed in **Platform Angle Instructions** on pages 26 and 27.

Lift Installation Instructions

6 Platform Angle Adjustment and Floor Level Adjustment

The platform angle and floor level positioning of the bridge plate (inboard roll stop) **must be properly adjusted before operating the lift with a passenger**.

Adjust the platform angle as detailed in **Platform Angle Adjustment Instructions** on pages 26 and 27.

Adjust the floor level positioning of the bridge plate (inboard roll stop) as detailed on pages 37-39.

7 Decal Application

⚠WARNING

Replace missing, worn or illegible decals. Failure to do so may result in serious bodily injury and/or property damage.

Note: Clean surfaces with isopropyl alcohol before decal application. Use a clean cloth or paper towel. **Do not** use oily shop rags. Wipe surface free of residue with dry portion of cleaning cloth.

Affix Warnings and Lift Operating Instructions decal 27204 and ADA Standee and Interlock decal 19342 to the vehicle door in a highly visible location near the control box as shown. Two Courtesy Requested decals are supplied to be posted on the vehicle as desired.

Replace any missing, worn or illegible decals!

Warnings and Lift Operating Instructions Decal 27204

ADA Standee and Interlock Decal 19342

8 Passenger's Seat (Vans)

Reinstall passenger's seat in suitable location using the **original (OEM) mounting hardware** if previously removed. **Torque seat mounting hardware per manufacturer's specifications**.

9 Owner's Manual

Be certain the lift owner's (operators) manual is in the lift mounted manual storage pouch.

⚠WARNING

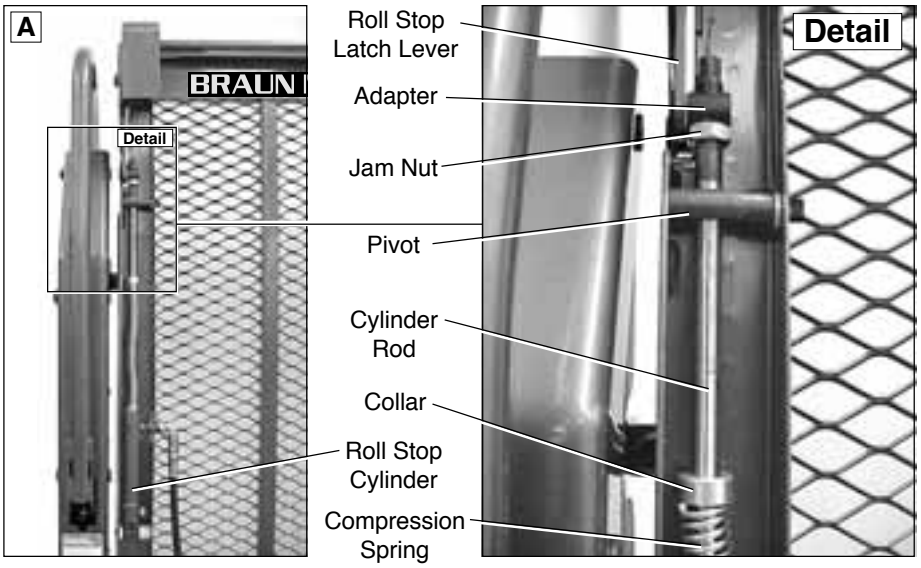
The lift operator's manual must be stored in the lift-mounted manual storage pouch at all times. Failure to follow this rule may result in serious bodily injury and/or property damage.

Installation Notice

A generic Lift Installation Checklist is provided as a final installation checklist to be given to your customer. The Lift Installation Checklist is the last page in this manual. Complete, remove (tear out) and forward the Installation Checklist to your customer to confirm that this lift has been properly installed.

Roll Stop Adjustment Instructions

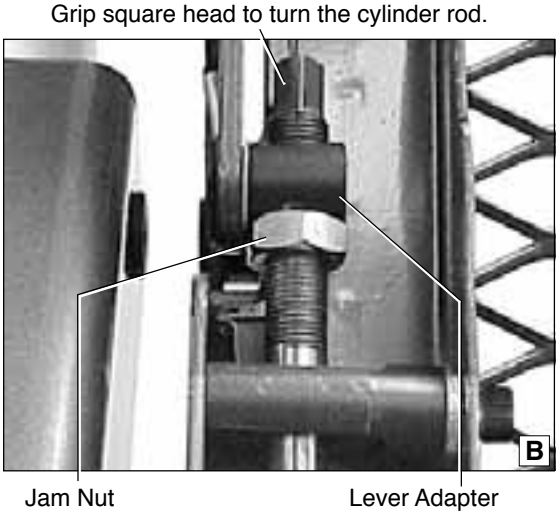
When replacing a roll stop or roll stop hydraulic cylinder, the roll stop must be properly adjusted during installation procedures. The roll stop cylinder rod must be adjusted to properly position the roll stop. Failure to do so may result in lift damage. **Read warning posted below.**



With the lift in the stowed position (cylinder must be fully retracted), adjust the cylinder rod to achieve proper roll stop position.

Carefully loosen (back off) the 1/2" jam nut positioned below the roll stop lever adapter.

Carefully turn the cylinder rod in or out of the threaded adapter to position the roll stop as detailed below.



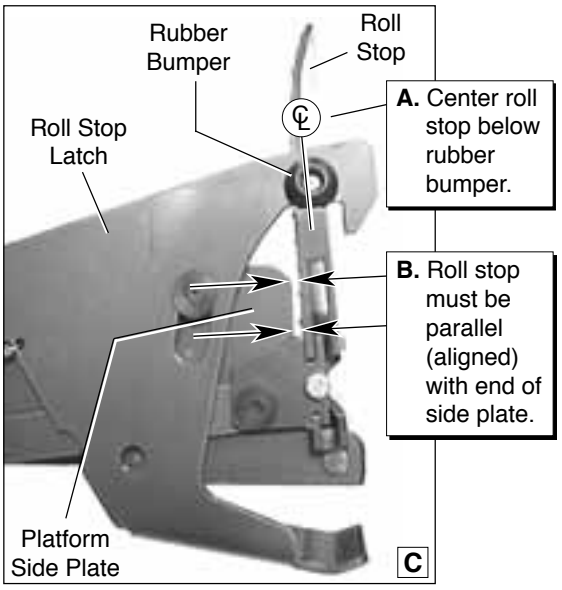
Caution: Grip the square head at the end of the roll stop cylinder rod (see Photo B). **Do not** grip the smooth portion of the rod. Doing so can damage the rod which can result in failure of the rod to move freely in and out of the roll stop cylinder pivot. The roll stop may not operate properly under this condition.

Roll Stop Positioning

A. Roll stop must be centered below latch-mounted rubber bumper. See Photo C.

B. Roll stop must be parallel (aligned) with end of platform side plate. See Photo C.

Caution: Do not allow the roll stop to contact the platform side plates. **Roll stop damage will occur**.


Rubber Bumper
Roll Stop
Roll Stop Latch
A. Center roll stop below rubber bumper.
B. Roll stop must be parallel (aligned) with end of side plate.
Platform Side Plate
C

⚠WARNING

Adjust roll stop as specified. Failure to do so may result in serious bodily injury and/or property damage.

⚠CAUTION

Roll stop contact with platform side plates will result in roll stop damage.

Platform Angle Adjustment Instructions

⚠WARNING

Adjust platform angle as detailed here. Failure to do so may result in serious bodily injury and/or property damage.

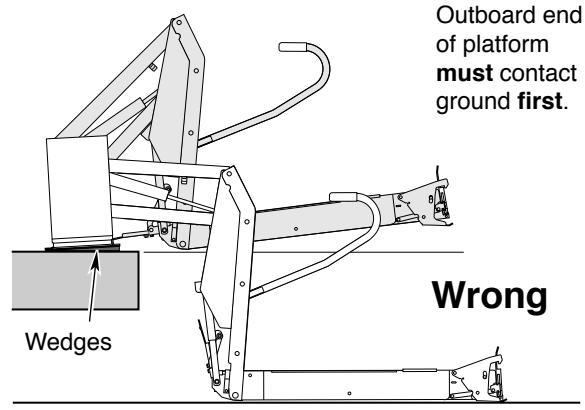
Adjusting the platform angle based on the relationship of the platform at ground level directly affects the angle of the platform when positioned at floor level. The platform angle **must** be adjusted so there is a balance between the angle at both positions (**equal amount of angle**). **Angle A** should **equal angle B** as shown at right (center).

Unfold the lift and visually examine the angle of the platform when positioned at floor level. Lower the platform fully and note the angle of the platform when it reaches ground level also. The **outboard end of the platform should contact the ground first** when the platform is lowered.

Normal (Average Floor-To-Ground) Installations: Typically there should be **approximately** 3/4" to 1" clearance between the inboard end of the platform and the ground when the outboard end of the platform contacts the ground.

Rear Door and Extensive Floor-To-Ground Installations: Installations where base plate wedges are used to tilt the lift inboard for adequate rear bumper clearance, **and** installations in vehicles with extensive floor-to-ground dimensions, require more platform angle adjustment than normal. **Before** the platform angle is adjusted in these types of installations, typically the outboard end of the platform will be angled severely upward when positioned at floor level.

Adjustment Allen screws are provided on each side of the lift platform for adjusting the platform angle. Details and photos are provided on the next page.



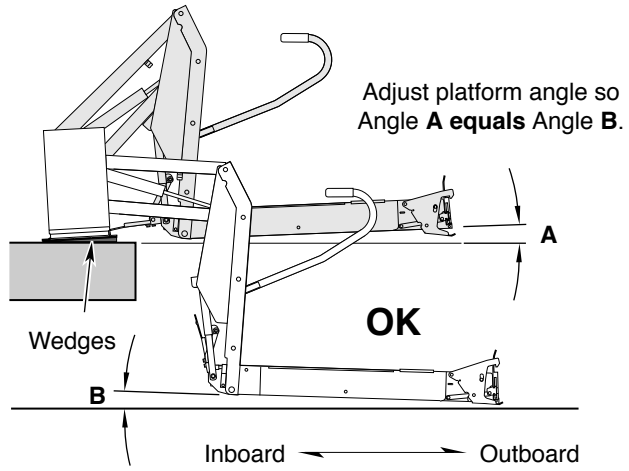
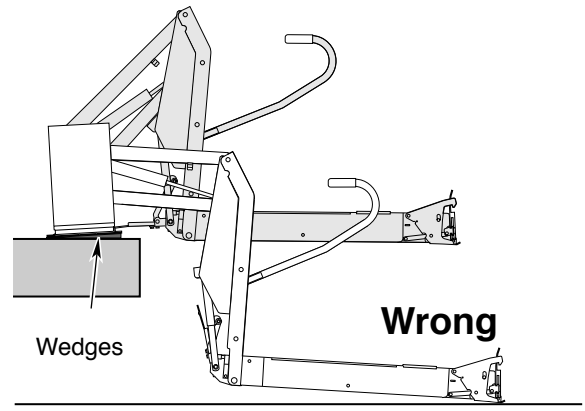
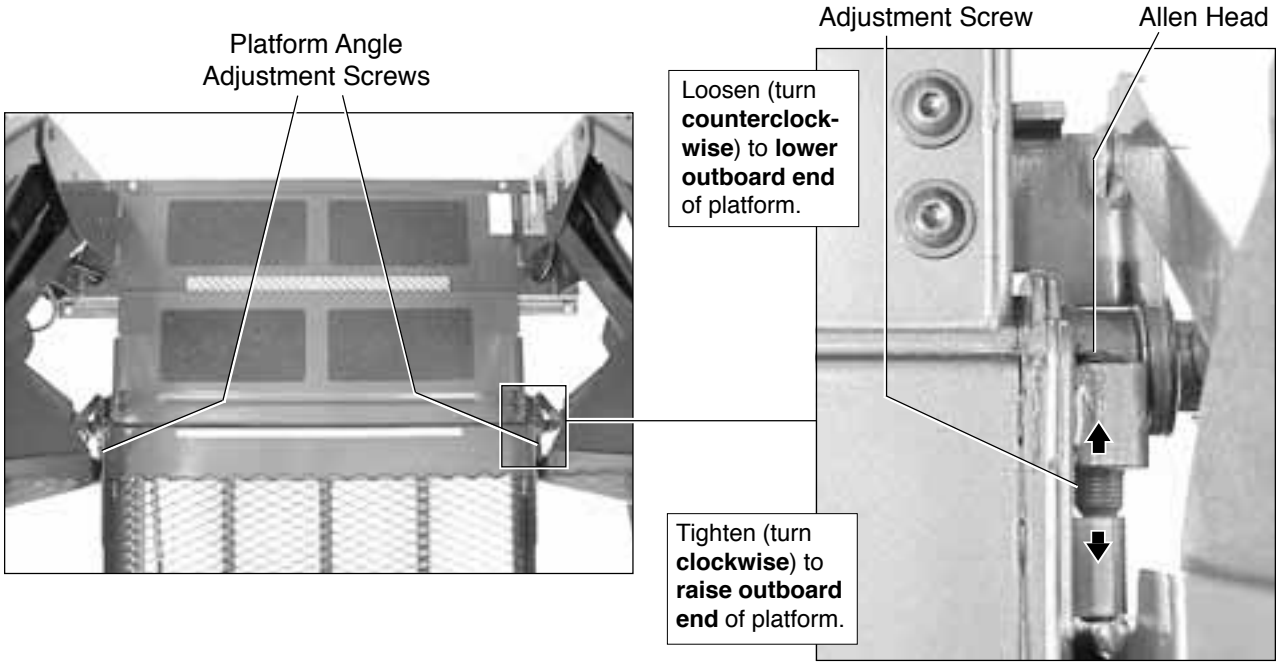


Figure T

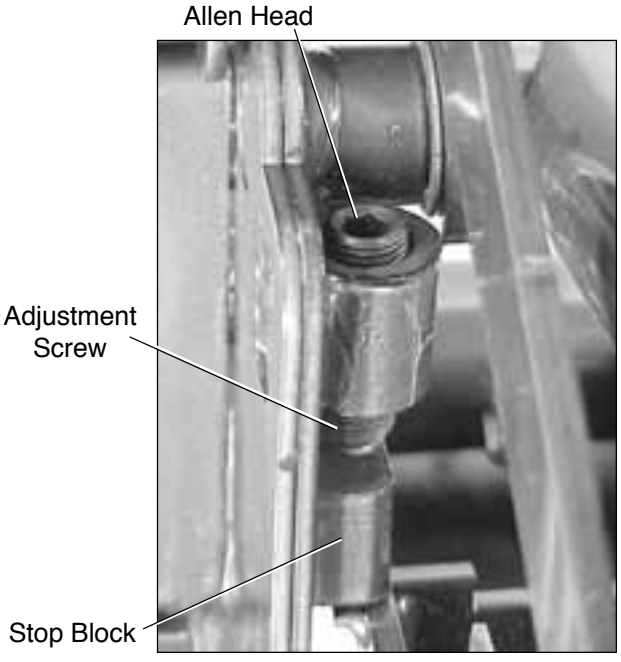


Platform Angle Adjustment Instructions

Adjustment Allen screws are provided on each side of the lift platform for adjusting the platform angle. Turn the adjustment screw **clockwise** to **raise** the **outboard end** of the platform. Turn the adjustment screw **counterclockwise** to **lower** the **outboard end** of the platform. **Note: Both** adjustment screws **must be adjusted equally**. Adjust platform angle as needed. See Figure T on previous page. Apply Loctite® to adjustment screws following adjustment.


Platform Angle
Adjustment Screws
Adjustment Screw
Allen Head
Loosen (turn **counterclockwise**) to **lower outboard end** of platform.
Tighten (turn **clockwise**) to **raise outboard end** of platform.

Floor Level Adjustment: Check bridge plate positioning as outlined on pages 38 and 39 when adjusting platform angle.



Quiet-Ride Adjustment Instructions

Adjustable Quiet-Ride Rubber Bumper Brackets and fixed rubber bumpers mounted at key locations aid in eliminating or reducing potential rattles. Improper installation procedures can result in potential rattles also. If lift rattles occur, review the details in this section for possible source(s) and remedies.

---

1. Vertical Upright Defelection:

Lift towers (vertical uprights) **must** be parallel (aligned) with the platform side plates. If the lift towers are deflected in (toward platform), or the towers move (vibrate) “side-to-side” during vehicle movement, metal-to-metal contact can occur between the parallel arm pivot pins and the platform side plates (particularly opposite-pump side). See Figure R on page 23.

Positioning of and tightening of base plate mounting bolts substantially affects vertical upright deflection and “side-to-side” movement of towers. Tighten base plate mounting bolts as detailed in Step 2 of the Lift Installation Instructions (see page 16).

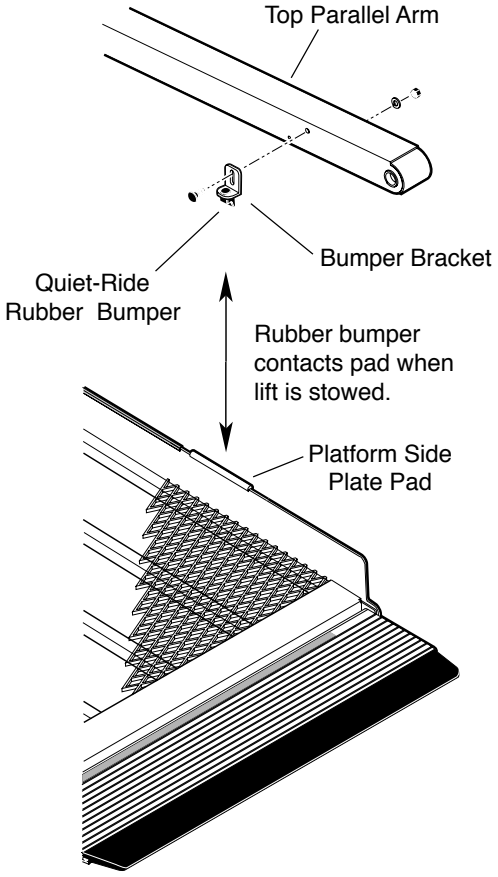
---

2. Quiet-Ride Rubber Bumper Brackets:

Quiet-Ride rubber bumpers are mounted to both top parallel arms to reduce "in-out" platform vibration. The rubber bumpers make contact with non-adjustable pads on the platform side plates. The rubber bumper mounting brackets have oval mounting slots provided for “in-out” adjustment.

Fold the platform in fully (stowed). Grip the top of the platform and attempt to move the platform "in-and-out." The Quiet-Ride rubber bumper should be contacting the platform side plate pad so that the platform does not rock (move “in-and-out”). If the platform can be easily moved in and out, reposition the adjustable Quiet-Ride rubber bumper bracket(s) as outlined below.

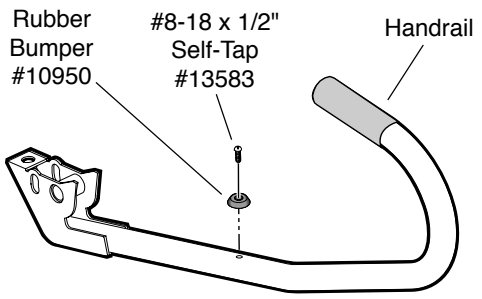
Mark the position of the bracket(s). Unfold the platform for easier access and reposition (shift) location of these brackets as needed to result in a tighter fit (positive contact) between the rubber bumper and the platform side plate pad. The bumper bracket is secured with a 5/16"-18 x 3/4" carriage bolt, 5/16" lock washer and a 5/16" hex nut. Reposition brackets as needed and **tighten** the **mounting hardware securely**.



---

3. Handrail Rubber Bumper:

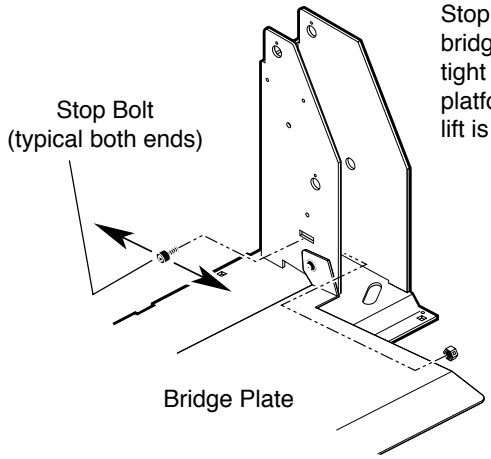
Vibration can occur between the handrails and the vertical arms. This vibration is eliminated with the rubber bumper mounted on each handrail (factory-equipped). The rubber bumper is positioned such that it contacts the vertical arm when the lift is in the fully folded (stowed) position and prevents direct metal-to-metal contact. Refer to the part numbers at the right for replacements.



Quiet-Ride Adjustment Instructions

4. Bridge Plate Stop Bolts:

Vibration can occur between the bridge plate and the platform when the lift is in the stowed position. Stop bolts are installed in the lift towers to keep the bridge plate vertical and tight against the platform. The bolts are installed in adjustable mounting slots. It **may** be necessary to adjust the stop bolts in order to **minimize** bridge plate rattle. With lift **fully folded**, grip the edge of the bridge plate and attempt to move it "in-and-out." If it can be easily moved, loosen and reposition the stop bolts as needed to tighten the bridge plate against the platform.

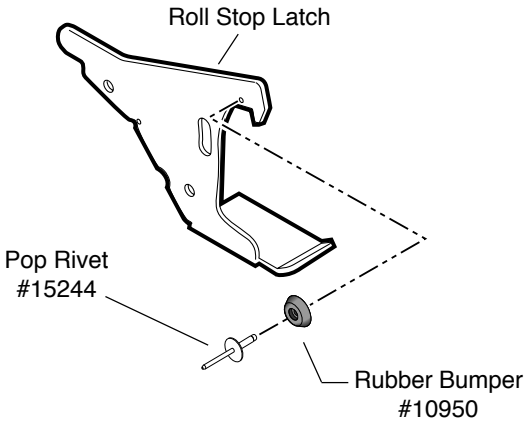


---

5. Roll Stop Latch Rubber Bumpers:

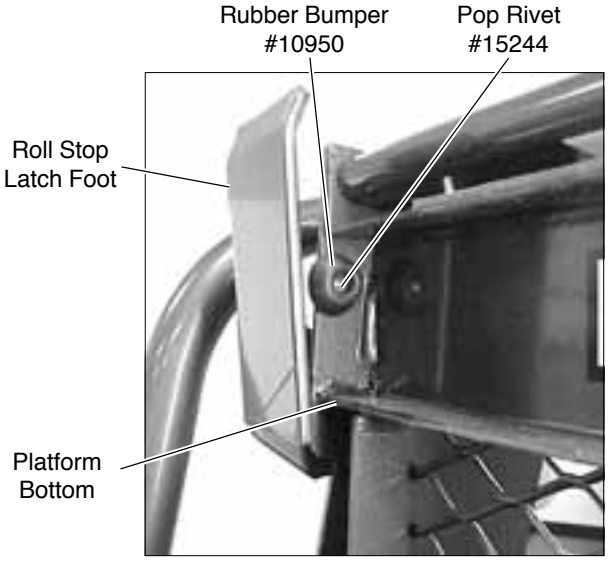
A. Roll Stop Contact

Vibration can occur between the roll stop and the roll stop latch. This vibration is eliminated with the rubber bumper mounted on the outer face of the latch (factory-equipped). The rubber bumper is positioned such that the edge of the bumper extends slightly below the latch in alignment with the roll stop. The bumper prevents direct metal-to-metal contact between the latch and the roll stop. Refer to the part numbers at the right for replacements. **Do not** position the bumper such that it prevents positive latching!

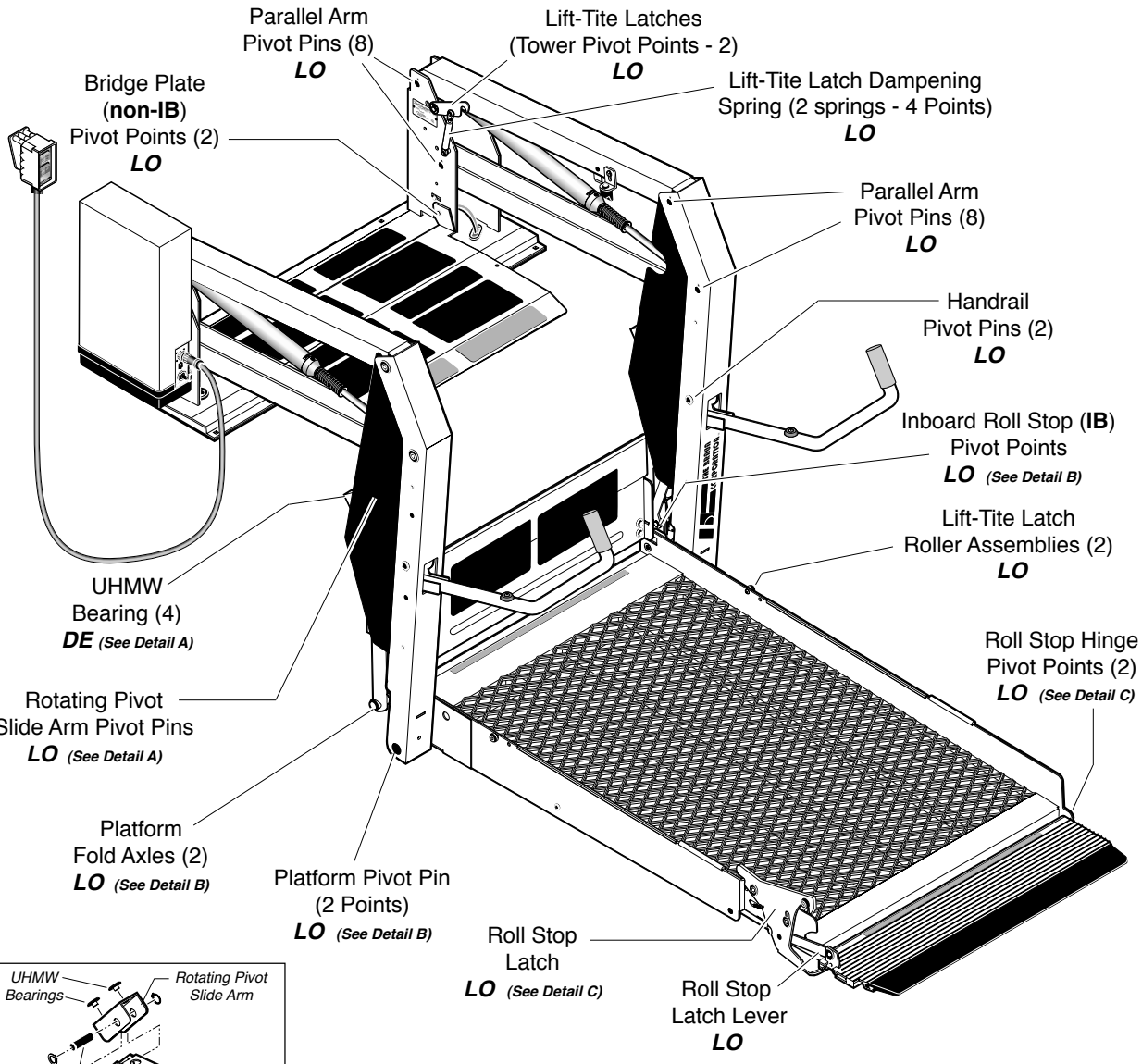


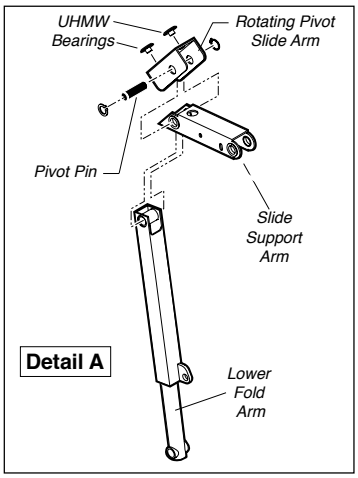
B. Platform Contact

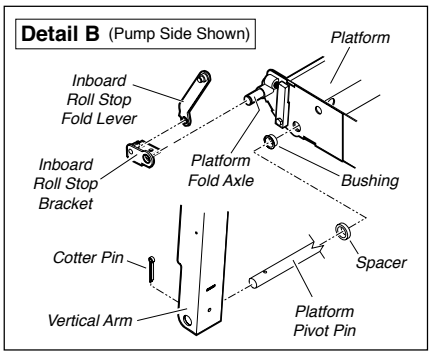
Vibration can occur between the roll stop latch foot and the platform when the platform is stowed. This vibration is eliminated with the rubber bumper mounted on the outboard bottom edge of the platform (factory-equipped). The rubber bumper is positioned such that when it contacts the roll stop latch foot it prevents direct metal-to-metal contact. Refer to the part numbers at the right for replacements.

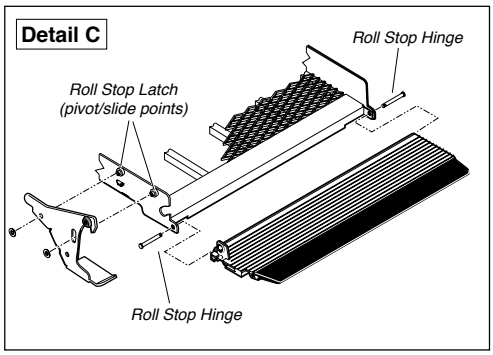


Lubrication Diagram and Chart


Parallel Arm Pivot Pins (8) LO
Lift-Tite Latches (Tower Pivot Points - 2) LO
Bridge Plate (non-IB) Pivot Points (2) LO
Lift-Tite Latch Dampening Spring (2 springs - 4 Points) LO
Parallel Arm Pivot Pins (8) LO
Handrail Pivot Pins (2) LO
Inboard Roll Stop (IB) Pivot Points LO (See Detail B)
Lift-Tite Latch Roller Assemblies (2) LO
UHMW Bearing (4) DE (See Detail A)
Roll Stop Hinge Pivot Points (2) LO (See Detail C)
Rotating Pivot Slide Arm Pivot Pins LO (See Detail A)
Platform Fold Axles (2) LO (See Detail B)
Platform Pivot Pin (2 Points) LO (See Detail B)
Roll Stop Latch LO (See Detail C)
Roll Stop Latch Lever LO







See the Maintenance/Lubrication Schedule for recommended applications per number of cycles or elapsed time.

Lubricant	Type	Specified (recommended) Lubricant	Available Amount	Braun Part No.
LO - Light Oil	Light Penetrating Oil (30 weight or equivalent)	LPS2, General Purpose Penetrating Oil	11 oz. Aerosol Can	15807
DE - Door-Ease	Stainless Stick Style (tube)	Door-Ease Stick (tube)	1.68 oz.	15806
LG - Light Grease	Light Grease (Multipurpose)	Lubriplate	14 oz. Can	15805

Maintenance and Lubrication Schedule

Proper maintenance is necessary to ensure safe, trouble-free operation. Inspecting the lift for any wear, damage or other abnormal conditions should be a part of all transit agencies daily service program. Simple inspections can detect potential problems.

The maintenance and lubrication procedures specified in this schedule **must** be performed by a Braun authorized service representative at the scheduled intervals according to the number of cycles or elapsed time, whichever comes first.

L915 Series lifts are equipped with hardened pins and self-lubricating bushings to decrease wear, provide smooth operation and extend the service life of the lift.

Components specified in the first section of the schedule to be lubricated with *Light Oil will typically not require lubrication following the first four weeks or one hundred cycles of lift use (although, the lift should be inspected as scheduled).

When servicing the lift at the consecutive recommended intervals, inspection and lubrication procedures specified in the previous sections should be performed (repeated). Clean the components and the surrounding area before applying lubricants. LPS2 General Purpose Penetrating Oil is recommended where *Light Oil is called out. Use of improper lubricants can attract dirt or other contaminants which could result in wear or damage to the components. Platform components exposed to contaminants when lowered to the ground may require extra attention.

Lift components requiring grease are lubricated during assembly procedures. When replacing these components, be sure to apply grease during installation procedures *(identified within the schedule with "see **Note** below")*. Specified lubricants are available from The Braun Corporation (part numbers provided on page 30).

⚠WARNING

Maintenance and lubrication procedures must be performed as specified by an authorized service technician. Failure to do so may result in serious bodily injury and/or property damage.

All listed inspection, lubrication and maintenance procedures should be repeated at "4 week or 100 cycle" intervals following the scheduled "1 Year or 1250 Cycles" maintenance. These intervals are a general guideline for scheduling maintenance procedures and will vary according to lift use and conditions. Lifts exposed to severe conditions (weather, environment, contamination, heavy usage, etc.) may require inspection and maintenance procedures to be performed more often than specified.

Discontinue lift use immediately if maintenance and lubrication procedures are not properly performed, or if there is any sign of wear, damage or improper operation. Contact your sales representative or call The Braun Corporation at 1-800-THE LIFT. One of our national Product Support representatives will direct you to an authorized service technician who will inspect your lift.

Note: Disregard references to components not present.

* Clean **before lubricating** if needed.

4 Weeks or 100 Cycles	Outboard roll stop hinge pivot points (2)	Apply * Light Oil - See Lubrication Diagram
	Roll stop latch (pivot/slide points)	Apply * Light Oil - See Lubrication Diagram
	Roll stop latch lever pivot points	Apply * Light Oil - See Lubrication Diagram
	Platform pivot pin (2 places)	Apply * Light Oil - See Lubrication Diagram
	Platform fold axles (2)	Apply * Light Oil - See Lubrication Diagram
	Inboard roll stop (**IB**) pivot points	Apply * Light Oil - See Lubrication Diagram
	Bridge plate (**non-IB**) pivot points (2)	Apply * Light Oil - See Lubrication Diagram
	Rotating pivot slide arm pivot points (2)	Apply * Light Oil - See Lubrication Diagram
	Parallel arm pivot points (8)	Apply * Light Oil - See Lubrication Diagram
	Handrail pivot pins (2)	Apply * Light Oil - See Lubrication Diagram
continued	Lift-Tite™ latches (tower pivot points - 2)	Apply * Light Oil - See Lubrication Diagram

Maintenance and Lubrication Schedule

continued **4 Weeks or 100 Cycles**	Lift-Tite™ latch gas (dampening) spring pivot points (2 springs - 4 points)	Apply * Light Oil - See Lubrication Diagram
	Lift-Tite™ latch roller assemblies (2)	Apply * Light Oil - See Lubrication Diagram
	Inspect lift for wear, damage or any abnormal condition	Correct as needed.
	Inspect lift for rattles	Adjust as needed. See Quiet Ride® Adjustment Instructions on pages 28 and 29.

3 Months or 300 Cycles	***Perform all procedures listed in previous section also***	
	Inspect Lift-Tite™ latches and gas springs for wear or damage (bent, deformed or misaligned), positive securement (external snap rings) and proper operation	Resecure, replace defective parts or otherwise correct as needed. *See **Note** below!*
	Inspect Lift-Tite™ latch roller assemblies for wear or damage, positive securement and proper operation	Correct, replace defective parts and/or relubricate.
	Inspect outboard roll stop for proper operation	Correct or replace defective parts.
	Inspect outboard roll stop latch for proper operation, positive securement, and detached or missing spring	Correct or replace defective parts and/or relubricate. See Lubrication Diagram
	Inspect inboard roll stop (**IB**) for: • Wear or damage • Proper operation • Positive securement (both ends)	Resecure, replace or correct as needed. See Platform Angle Instructions and Roll Stop Adjustment Instructions.
	Inspect handrail components for wear or damage, and for proper operation	Replace defective parts.
	Inspect bridge plate (**non-IB**) for proper operation and positive securement (pivot bolts)	Correct or replace defective parts and/or relubricate. See Lubrication Diagram
	Check adjustment of platform sensor (fold) switch (pump mounted hydraulic pressure switch)	Adjust or replace as needed. See Systems Descriptions (and applicable supplements) for details and procedures.
	Inspect microswitches for securement and proper adjustment.	Resecure, replace or adjust as needed. See Systems Descriptions for Microswitches.
	Make sure lift operates smoothly	Realign upright supports. Lubricate or correct as needed.

1 Year or 1250 Cycles	***Perform all procedures listed in previous sections also***	
	Inspect inboard roll stop (**IB**) operation. Roll stop should just rest on the top surface of the base plate.	Adjust microswitches as needed. See pages 36-39.
	Inspect external snap rings: • Handrail pivot pins (2 per pin) • Rotating pivot arm pivot pins (2 per pin **IB**) (1 per pin **non-IB**) • Platform fold axles (1 per axle) • Inboard roll stop (**IB**) lever and bracket pins (1 per pin)	Resecure or replace if needed.
	Inspect cotter pins on platform pivot pin (2)	Resecure, replace or correct as needed

Maintenance and Lubrication Schedule

1 Year or 1250 Cycles	Hydraulic Fluid (Pump) - Check level. **Note:** Fluid should be changed if there is visible contamination. Inspect the hydraulic system (cylinder, hoses, fittings, seals, etc.) for leaks if fluid level is low.	Use Dextron III transmission fluid. Check fluid level with **platform lowered fully** and **roll stop unfolded fully**. Fill to within 1/2" of the bottom of the 1-1/2" fill tube (neck).
	Remove pump module cover and inspect: • Hydraulic hoses, fittings and connections for wear or leaks • Harness cables, wires, terminals and connections for securement or damage • Circuit breaker and solenoids for securement or damage	Resecure, replace or correct as needed.
	Inspect cylinders, flow control valves and hydraulic connections for wear, damage or leaks	Tighten, repair or replace if needed.
	Inspect roll stop cylinder hose assembly (hose, fasteners, connections, etc.) for wear, damage or leakage	Tighten, repair or replace if needed.
	Inspect parallel arms, bushings and pivot pins for visible wear or damage	Replace if needed.
	Inspect parallel arm pivot pin mounting bolts (8)	Tighten or replace if needed.
	Inspect handrails and pivot pins for visible wear or damage	Replace if needed.
	Inspect vertical arms, platform fold arm bushings and platform pivot pin for visible wear or damage	Replace if needed. *See **Note** below!*
	Inspect platform pivot arms, rotating pivot slide arms, slide support arms and associated pivot pins for visible wear or damage	Replace if needed.
	Inspect platform pivot arms for detached, worn or missing unfold springs (**non-IB**)	Correct or replace
	Inspect gas springs (cylinders) for wear or damage, proper operation and positive securement (**IB**)	Tighten, replace or correct as needed
	Inspect rotating pivot slide arm UHMW slide bearings (buttons)	Replace if needed.
	Inspect vertical arm plastic covers	Resecure or replace if needed.
	Inspect power cable	Resecure, repair or replace if needed.
	Mounting	Check to see that the lift is securely anchored to the vehicle and there are no loose bolts, broken welds, or stress fractures.
	Decals and Antiskid	Replace decals if worn, missing or illegible. Replace antiskid if worn or missing. See Decals and Antiskid section on pages 70-73

Consecutive 4 Week or 100 Cycle Intervals	**Repeat all** previously listed inspection, lubrication and maintenance procedures at 4 week or 100 cycle intervals.

Note: *Disassembly required if replacing these items. Apply **Light Grease** to these components during reassembly. Multipurpose **Light Grease** (Lubriplate) is available from The Braun Corporation (part number 15805).*

Systems Descriptions

General Operation

Braun L915 Fully Automatic lifts are powered by an electric/ hydraulic system operating two single-acting hydraulic **main cylinders** for power up/fold and gravity unfold/down operation. This combination reduces battery drain and helps prevent lift alignment problems.

The hydraulic system supplies hydraulic fluid to and from the cylinders which unfold, lower, raise and fold the platform. The hydraulic system operates an additional single-acting hydraulic **roll stop cylinder** which folds (raises) the outboard roll stop to the vertical position. A compression spring unfolds (lowers) the roll stop to the horizontal (ramp) position.

Automatic Floor Level Switching: L915 Series lifts feature automatic floor level switching. This feature eliminates the need for the lift operator to position and stop the platform at vehicle floor level when unfolding the platform from the stowed position and when raising the platform from ground level.

Pressing the UNFOLD switch unfolds the platform from the stowed position to floor level. The platform stops automatically at floor level when fully unfolded. Pressing the UP switch raises the platform from the ground level to floor level. When raising the platform from ground level, the platform automatically stops at floor level when raised fully.

The automatic floor level switching is controlled by two independently adjustable microswitches (limit switches). See page 37.

Read warning at right! If the lift platform does not automatically stop at floor level as outlined, **discontinue lift operation immediately**. Contact your lift sales representative or call The Braun Corporation at 1-800-THE LIFT.

Bridging: The L915 electrical and hydraulic system incorporates a bridging feature. This feature stops the down travel of the platform if the outboard end of the platform contacts a raised surface (such as a curb), preventing the operator from lowering the inboard end of the platform resulting in an unsafe platform angle.

⚠WARNING

Maintenance and repair procedures must be performed as specified by authorized service personnel only. Failure to do so may result in serious bodily injury and/or property damage.

⚠WARNING

Discontinue lift use if platform does not stop automatically at floor level. Failure to do so may result in serious bodily injury and/or property damage.

Electrical

Power Source: The lift draws its power from a 12 volt DC battery (standard models). Special applications are powered by a 24 volt system.

Ground: The lift electrical system **must be grounded** to the vehicle for proper operation. See the **Chassis Ground Notice** on page 15 of this manual.

Pump Motor: Motor brushes are **not replaceable**. The pump motor must be replaced if the brushes become worn.

Relay: A relay is an electrically operated electromagnetic switch that uses a small current to control a much larger current. The L915 electrical system incorporates the use of one relay (Bridging Relay).

Circuit Sentry: This manual reset circuit breaker protects the system from overloads (100 ampere for 12 volt systems and 70 ampere for 24 volt systems). The Circuit Sentry is located as close to the battery as possible for maximum protection. In event of failure, wait 60 seconds, then turn the RESET lever to reset the breaker.

5 Ampere Circuit Breaker: This circuit breaker is a single pole, manual reset, thermally-operated circuit protection device rated at 5 amperes that protects a circuit from being overloaded beyond the safe current carrying capacity of the circuit. When the breaker heats up to a certain temperature, it interrupts the source of current and, when the cause of the overload is corrected and it cools back down, it may be reset to provide current.

External Electrical "Up/Fold" Solenoid: When the platform is below floor level, pressing the UP switch energizes this solenoid. The solenoid directs current to the pump motor which powers the hydraulic pump to raise the platform. The Up/Fold microswitch is activated when the platform reaches floor level. This interupts the UP control switch circuit which de-energizes the solenoid and removes current to the pump motor and stops the platform. Releasing the UP switch will also de-energize the solenoid removing current to the pump motor and stopping the raising function.

Pressing the FOLD switch then energizes the Up/Fold solenoid through the fold circuit. The solenoid in turn directs current to the pump motor to fold the platform. Releasing the FOLD switch de-energizes the solenoid removing current to the pump motor and stopping the folding function.

Note: When the platform reaches the stowed (fully folded) position, the Hydraulic Platform Sensor Pressure Switch is activated (minimum pressure reached). The activated Pressure switch shuts the pump moter off also. See page 41 for further details.

M268 Solenoid/Hydraulic Valves: L915 lift models are equipped with the M268 hydraulic pump (further details in Hydraulic section). The M268 features pump-mounted **Unfold**, **Bridging** and **Down** solenoid/hydraulic valves (details follow).

When the platform is in the stowed (fully-folded) position, pressing the UNFOLD switch energizes all three solenoid/valves. When the platform reaches floor level, the solenoid/valves are de-energized by the Unfold/Down microswitch circuit. Releasing the UNFOLD switch also de-energizes the solenoid/valves.

The Bridging and Down solenoid/hydraulic valves are also energized while the DOWN switch is pressed when the platform is fully unfolded. Both solenoid/valves will remain energized until the DOWN switch is released.

Note: The Bridging solenoid/hydraulic valve will remain energized until the DOWN switch is released **or** the Bridging microswitch is deactivated. Deactivation of the Bridging microswitch stops the down travel of the platform while allowing the roll stop to deploy.

Troubleshooting: A problem with the solenoid/valves can be electrical or hydraulic. Follow the **Quick-Check** troubleshooting procedure when troubleshooting.

Quick-Check:

Read warning posted at right! Remove all rings, watches, etc. prior to doing any electrical work near the pump motor.

With the lift stowed, hold a paper clip (or other magnetically attracted object) near the center threaded post on the solenoid/valve while pressing the UNFOLD switch (**stand clear of platform**). If the solenoid post does not magnetically attract the paper clip, there is an electrical problem. If attracted, there is a hydraulic problem.

Note: If this solenoid post is bent at all, the hydraulic valve will not operate.

Electrical (continued)

Microswitches: Three microswitches (limit switches) are incorporated in the L915 electrical system (Unfold/Down, Up/Fold and Bridging microswitches)**.** Details and photos of all microswitches are provided in this section. Adjust microswitch(s) as detailed (**if necessary only**).

Microswitch Sequence:

Stowed Position: When the lift is in the stowed position, the Up/Fold and Unfold/Down microswitches are activated (common and normally open terminals have continuity).

Unfold (Out) and Lowering Sequence: When the lift is in the stowed position, the Unfold/Down microswitch is activated. This provides current to the UNFOLD (Out) switch circuit to energize the Unfold, Bridging and Down solenoid/valves to unfold the platform. While the Unfold/Down microswitch is activated, the DOWN switch circuit is interupted. When the platform unfolds fully (reaches floor level), the Unfold/Down microswitch is deactivated (at rest). Deactivating this microswitch interupts the UNFOLD (Out) switch circuit and redirects current to the DOWN switch circuit to re-energize the Bridging and Down solenoid/valves when the DOWN switch is pressed.

Bridging Sequence: When the platform unfolds fully (reaches floor level), the Bridging microswitch is activated. The Bridging microswitch will be deactivated if the outboard end of the platform contacts the unloading surface before the inboard end while the DOWN switch is pressed. The inboard end of the platform may not contact the unloading surface at all in such cases as a curb or uneven ground. The deactivated Bridging microswitch interupts power to the DOWN switch circuit and stops the down travel of the platform (while allowing the roll stop to deploy). This prevents the operator from lowering the inboard end of the platform resulting in an unsafe platform angle.

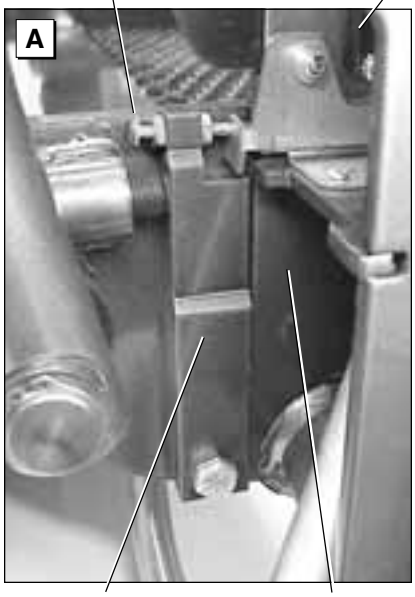
Raise and Fold (In) Sequence: When the platform is below floor level, the Up/Fold microswitch is deactivated (at rest). This directs current to the UP switch circuit to energize the Up/Fold solenoid to direct current to the pump motor when the UP switch is pressed. The FOLD (In) switch circuit is interupted when the platform is below floor level. The Up/Fold microswitch is activated when the platform reaches floor level. This interupts the UP switch circuit and redirects current to the Fold (In) switch circuit when the FOLD switch is pressed. This re-energizes the Up/Fold solenoid and directs current to the pump motor.

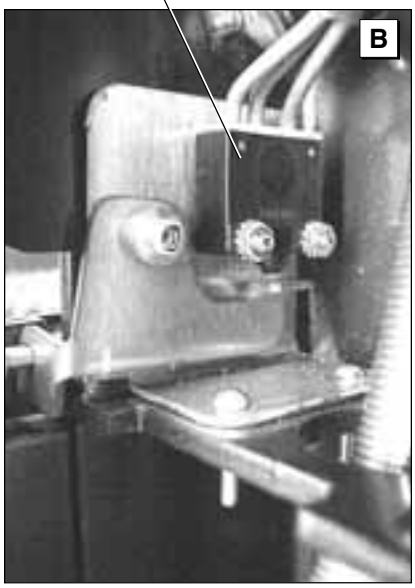
Systems Descriptions

Bridging Microswitch: The bridging microswitch is located at the bottom of the left (rear) vertical arm. See Photos A and B. An adjustment screw is built into the platform stop block.

The bridging microswitch will be deactivated if the outboard end of the platform contacts the unloading surface before the inboard end while the DOWN switch is pressed.

The deactivated bridging microswitch interrupts power to the DOWN switch circuit and stops the down travel of the platform (while allowing the roll stop to deploy).





Unfold/Down Microswitch:

Turn adjustment bolt counter-clockwise to stop platform unfold function sooner. Turn adjustment bolt clockwise to allow platform to unfold further.

Unfold/Down and Up/Fold Microswitches: The Unfold/Down and Up/Fold microswitches (limit switches) are located between the pump module and the tower.

Adjustment: Use a 7/16" socket wrench to turn the two 1/4"-20 x 3" hex bolts to reposition the limit switches. Adjust these microswitches as outlined at right and on Microswitch Adjustment Instructions decal 24242 (on pump module).

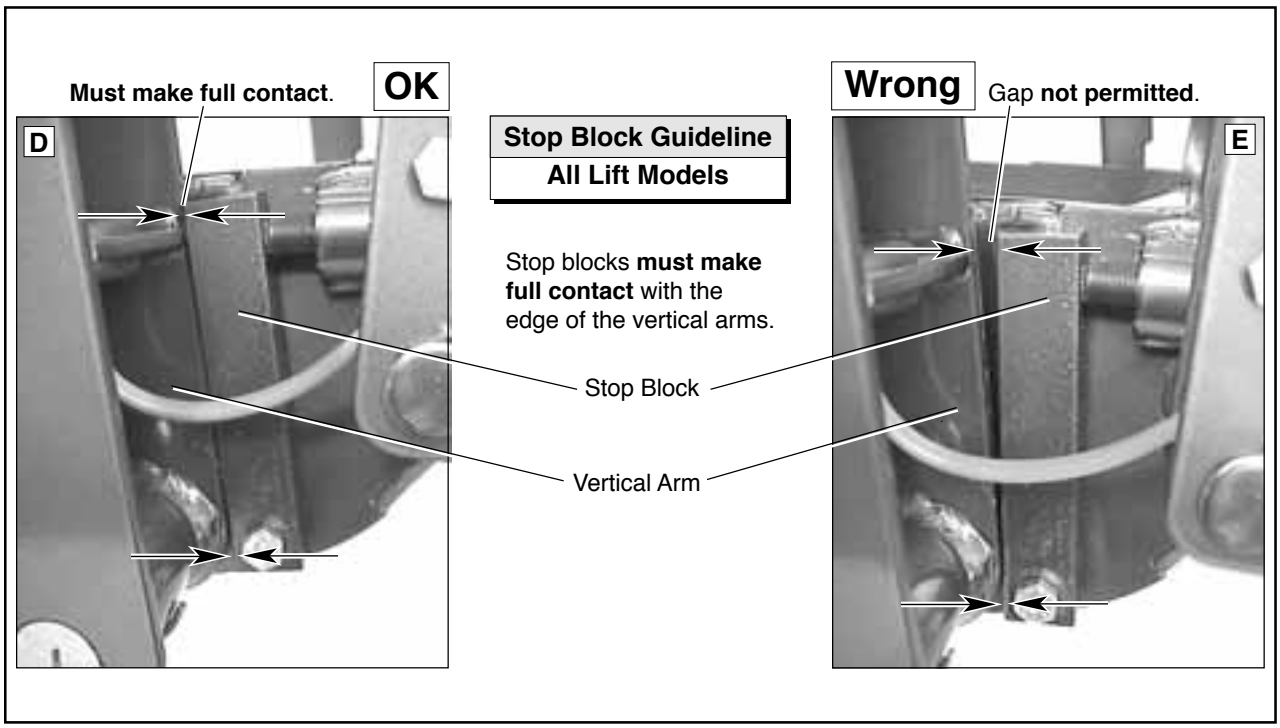
Floor Level Guideline Adjustments: The Unfold/Down and Up/Fold microswitches control platform and bridge plate positioning (fixed bidge plates and automatic inboard roll stops). Ensure floor level adjustments are correct as outlined on pages 38 and 39.

Platform Angle Adjustments: Check platform angle as outlined on pages 26 and 27 when adjusting bridge plate positioning.

Up/Fold Microswitch:

Turn adjustment bolt clockwise to stop raise function sooner. Turn adjustment bolt counterclockwise to allow platform to raise further.

Floor Level Guideline Adjustments



Floor Level Guideline for **Fixed** Inboard Roll Stop (**Non-IB**) Lift Models**:**

⚠WARNING

Improper microswitch adjustment may result in serious bodily injury and/or property damage.

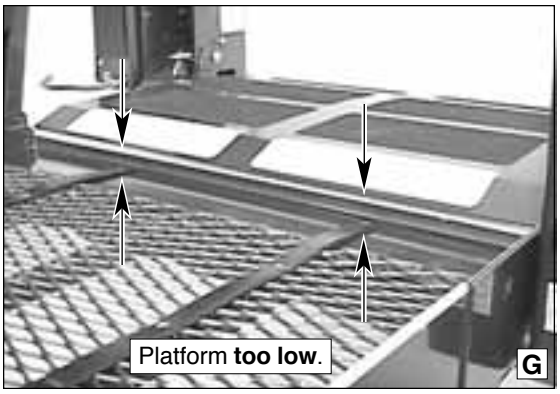
Microswitches should be adjusted so that the platform is fully unfolded allowing the stop blocks to make full contact with the inboard vertical edge of the vertical arms (see Photo D). **Failure to do so can damage the lift**.

Photo E shows the lift with an incorrect Unfold/Down microswitch setting which prevents the platform from fully unfolding (stop blocks not making full contact with vertical arms). Adjust microswitches as outlined on page 37.

The bridge plate should be positioned so that the outboard edge rests solidly on the platform UHMW slides when at floor level as shown in Photo F. With these conditions met, slightly raise or lower platform to provide a smooth (level) transition between the platform, bridge plate and the base plate (shown in Photo F). Photo G shows lift with the Up/Fold microswitch set too low which causes a gap between bridge plate and platform.

OK Bridge plate **must be level** and **must rest fully on UHMW slides**.

Wrong Gap **not permitted**.



Floor Level Guideline for **Automatic** Inboard Roll Stop (**IB**) Lift Models**:**

⚠WARNING

Improper microswitch adjustment may result in serious bodily injury and/or property damage.

Microswitches should be adjusted so that the platform is fully unfolded allowing the stop blocks to make full contact with the inboard vertical edge of the vertical arms (see Photo D). **Failure to do so can damage the lift**.

Photo H shows lift with an incorrect Unfold/Down microswitch setting which prevents the platform from fully unfolding.

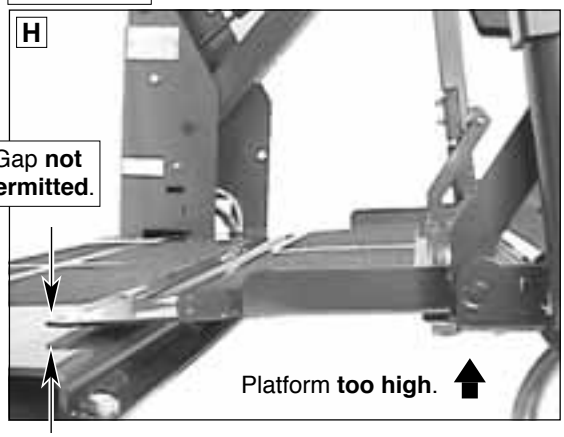
The bridge plate should be positioned so that the inboard edge of bridge plate rests solidly on base plate as shown in Photo I when at floor level. There should be a smooth (level) transition between the platform, bridge plate and the base plate (shown in Photo I).

In Photo J, the platform is fully unfolded but the Up/Fold Microswitch is not adjusted correctly and stops the up function too early causing the bridge plate to be raised up off the base plate. If the Unfold/Down microswitch is set to stop the unfold function too early, the bridge plate will overlap more of the base plate but will not contact the base plate (shown in Photo J).

Microswitch Adjustment:
Adjust Unfold/Down and Up/Fold microswitches as outlined on page 37 to set floor level position.

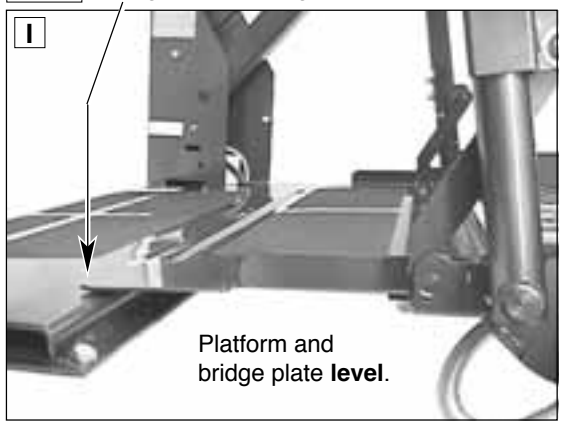
Wrong

H



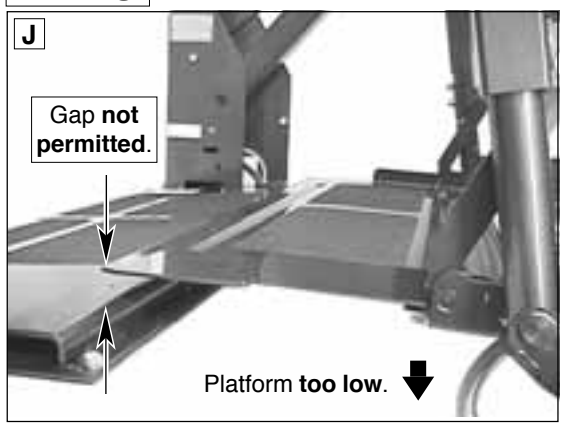
OK Bridge plate resting properly on base plate.

I



Wrong

J



Hydraulics

M268 Hydraulic Pump: Fixed displacement external gear type hydraulic pump with 12 VDC electric motor and 76 cubic inch fluid reservoir. The pressure relief valve is factory set at 2100 psi. The Braun Pump Code for front or rear mounted 12 volt M268 pumps is **30**. **Note:** 24 Volt pumps are available for special applications and have a Braun Pump Code of **31**.
Pump Modules: Pump modules are available as a complete quick-service repair unit. See the Pump Module sections for detailed breakdowns on pages 58 through 61.

Hydraulic Fluid: Use Dextron III automatic transmission fluid. Make sure the **platform** is **fully lowered** and **roll stop** is **fully unfolded** when checking fluid level or adding fluid. Fill to within 1/2" of the bottom of the 1-1/2" diameter fill tube (neck). The maximum fluid level is designated on the pump reservoir with decal 26735. **DO NOT** use a solid plug or fill cap without a breather hole. Doing so will result in pump and/or reservoir damage.

Contamination: Fluid should be changed if there is visible contamination. Inspect the hydraulic system (cylinder, hoses, fittings, seals, etc.) for leaks if fluid level is low.

Cold Weather Applications: The oil can be thinned with two (2) tablespoons of diesel fuel. The oil should be changed when warm weather returns. **Note:** We recommend SAE 10 W non-detergent oil mixed by volume with no more than 30% #1 fuel oil or kerosene for full time cold weather applications.

Pump Mounted Electrical "Unfold" Solenoid/ Hydraulic Valve: When the platform is in the stowed (fully-folded) position, pressing and holding the UNFOLD switch circuit energizes this solenoid/valve (the Bridging and Down Solenoid/Valves are energized also). When energized, it directs the flow of hydraulic fluid to the internal manifold orifice (flow is through internal manifold pressure compensator during the de-energized status). The manifold orifice meters a limited rate of hydraulic fluid flow from the lift cylinders during the unfold cycle to reduce the rate of the platform deployment.

When the platform unfolds fully (reaches floor level), the Unfold/Down microswitch is deactivated (at rest). Deactivating this microswitch interrupts the UNFOLD (Out) switch circuit and redirects current to the DOWN switch circuit to re-energize the Bridging and Down solenoid/valves when the DOWN switch is pressed.

Troubleshooting: A problem with this solenoid/ valve can be electrical or hydraulic. Follow the **Quick-Check** troubleshooting procedure detailed the Solenoid/Hydraulic Valve section on page 35 when troubleshooting.

Pump Mounted Electrical "Bridging" Solenoid/ Hydraulic Valve: When the platform is in the stowed (fully-folded) position, pressing the UNFOLD switch energizes this solenoid/valve. When the platform reaches floor level, the Bridging solenoid/ valve is de-energized by the Unfold/Down microswitch circuit. Releasing the UNFOLD switch also de-energizes this solenoid/valve.

This solenoid/valve is also energized while the DOWN switch is pressed (when the platform is fully unfolded). It will remain energized until the DOWN switch is released or the bridging microswitch is deactivated. If the bridging microswitch is deactivated, the bridging solenoid/valve is de-energized which prevents fluid from flowing from the lifting hydraulic cylinders to the reservoir and stops the lowering of the platform (while allowing oil flow from the roll stop cylinder - roll stop deploys).

Troubleshooting: A problem with this solenoid/ valve can be electrical or hydraulic. Follow the **Quick-Check** troubleshooting procedure detailed the Solenoid/Hydraulic Valve section on page 35 when troubleshooting.

Pump Mounted Electrical "Down" Solenoid/ Hydraulic Valve: The UNFOLD switch circuit energizes this solenoid/valve which allows hydraulic fluid to return from the cylinders to the reservoir at a limited rate, thus allowing gravity to unfold the platform. Fluid flows through the internal manifold valve and orifice **before** reaching the Down valve. The Unfold/Down microswitch is deactivated (at rest) when the platform unfolds fully (reaches floor level), which interrupts the UNFOLD switch circuit, thereby de-energizing the solenoid/valves. Releasing the UNFOLD switch de-energizes this valve also. This stops and holds the platform at the current position by stopping the flow of hydraulic fluid from the cylinders to the reservoir.

When the platform unfolds fully to floor level and the Unfold/Down microswitch is deactivated (at rest),

pressing the DOWN switch then energizes this solenoid/valve. The manifold Unfold solenoid/valve is de-energized, which routes the hydraulic fluid through the manifold internal pressure compensator valve before allowing it to return to the reservoir from the cylinders, thus allowing gravity to lower the platform at a reduced rate. The manifold internal pressure compensator valve allows a limited rate of hydraulic fluid flow dependent upon platform load.

Releasing the DOWN switch de-energizes the solenoid/valve allowing it to close, stopping the flow from the cylinders to reservoir. This stops and holds the platform at the current position.

If the Bridging microswitch has been deactivated while the Down switch is being pressed, only the Down solenoid/valve remains energized. This allows the hydraulic fluid to flow only from the roll stop cylinder to the reservoir once the roll stop latch releases the roll stop (allowing the roll stop to deploy).

Troubleshooting: A problem with this solenoid/valve can be electrical or hydraulic. Follow the **Quick-Check** troubleshooting procedure detailed the Solenoid/Hydraulic Valve section on page 35 when troubleshooting.

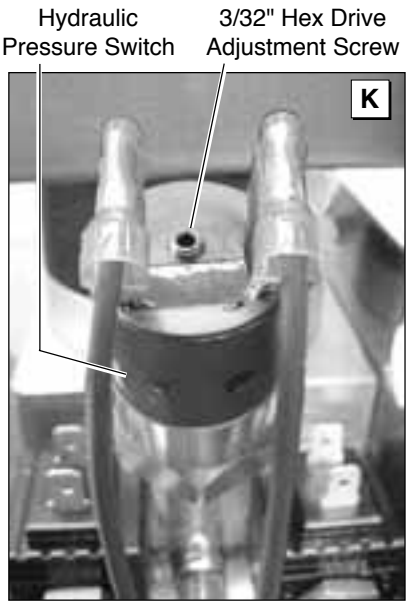
Hydraulic Platform Sensor Pressure Switch: L915 lift models are equipped with a hydraulic platform sensor pressure switch. The hydraulic pressure switch senses weight on the platform and prohibits the platform from folding when a passenger is on the platform.

⚠WARNING

Improper hydraulic pressure switch adjustment may result in serious bodily injury and/or property damage.

The platform sensor pressure switch is mounted to the hydraulic pump. This switch is activated when weight is on the platform. This opens the circuit and prevents the platform from folding if the FOLD (In) switch is pressed. When there is no load on the platform, the platform sensor pressure switch completes the circuit and allows the platform to be folded when the FOLD (In) switch is pressed.

Note: The pressure switch is also activated when the platform folds to the stowed position (shuts pump motor off).



When to Adjust the Platform Sensor Pressure Switch:

Hydraulic platform sensor pressure switches are factory set and should require no adjustment (under normal conditions). The conditions listed at right indicate the need to adjust the pressure switch. Refer to the switch adjustment instructions provided.

1. Empty platform will not fold or there is excessive intermittent pump operation during the fold cyle.
2. Pressure switch replacement.
3. Mechanical adjustment to and/or replacement of lift components that may affect the amount of hydraulic force required to fold the platform.

Pressure Switch Adjustment Instructions:

1. Unfold and lower the platform to the ground. Place a 75 pound load in the center of the platform and raise the platform to floor level.
2. Press the IN (Fold) switch. If the pump shuts off and the platform does not fold, proceed to Step 3. If the platform starts to fold and the pump does not shut off, or skips (cycles on and off), proceed to Step 4.
3. Although the pump shut off and the platform did not fold, you must ensure that the pressure switch is set correctly so there is no hesitation when folding an empty platform. Using a 3/32" hex

drive, turn the adjustment screw clockwise 1/16 to 1/8 turn at a time. **Note:** Press the OUT (Unfold) switch to return the platform to floor level before each adjustment. Press the IN (Fold) switch to test operation following each adjustment. Repeat until the pump starts cycling on and off, folding the platform.

Return the platform to floor level, reposition (center) the weight and turn the adjustment screw counterclockwise 1/16 to 1/8 intervals until the weight shuts the pump off. Proceed to Step 5.

4. The pump did not shut off or skipped (cycled on and off). The pressure switch must be adjusted to a positive shutoff with the 75 pound load. Return the platform to floor level and reposition (center) the weight. Using a 3/32" hex drive, turn the adjustment screw counterclockwise 1/16 to 1/8 intervals until the weight shuts the pump off. **Note:** Press the OUT (Unfold) switch to return the platform to floor level before each adjustment. Press the IN (Fold) switch to test operation following each adjustment. Proceed to Step 5.

5. Test the Fold function with an empty platform. The platform should fold without any hesitation or "skipping." If it does hesitate, inspect and lubricate the lift pivot points. Excessive friction at the pivot points can cause hesitation when folding.

Cylinder Mounted Flow Control Valves (pressure compensators): L915 Series lift models are equipped with two external flow control valves (one for each lift main cylinder). This device is sized to allow unrestricted hydraulic fluid to flow in and out of the lift cylinders during normal operation. The valve meters a limited rate of oil flow from the lift cylinders in the event there is an external hydraulic fluid leak between the cylinders and the pump, (preventing rapid platform descent). This is a nonadjustable fixed valve. The arrow on the valve points toward the pump (hex nut toward the cylinder).

⚠WARNING

Contact The Braun Corporation before adjusting hydraulic pressure relief valve. Failure to do so may result in serious bodily injury and/or property damage.

Pressure Relief Valve: This adjustment on the pump unit limits the maximum oil pressure in the system to a safe level. It also keeps the amp draw and battery drain at a minimum when the cylinders reach full stroke. The M268 pressure relief valve is preset at 2100 psi. **Do not** tamper with this adjustment unless absolutely necessary (will not lift load) and then, **only** after contacting The Braun Corporation.

Relief Valve Access: The pump module cover must be removed to access the relief valve (access hole not provided).

Relief Valve Adjustment Procedure:

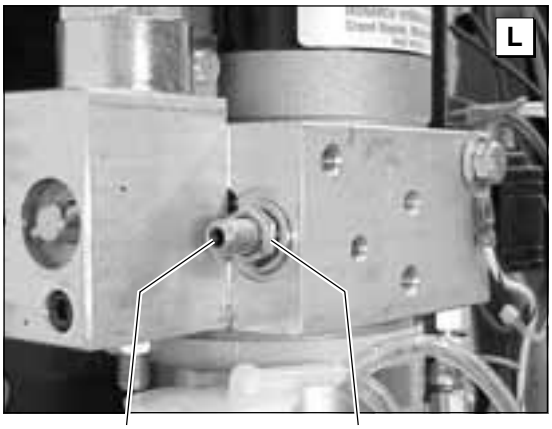
1. Position a 9/16" wrench onto the hex nut retaining the Allen screw. Insert a 3/16" Allen wrench into the Allen screw. Secure the Allen screw and loosen the hex nut. **Do not** remove nut or Allen screw.

2. Place load on platform (equal to weight not lifting).

3. Hold the hex nut and turn the Allen screw clockwise until pump lifts the load. Turn the Allen screw in an additional 3/4 turn, then unscrew it 1/4 turn. This action ensures that relief valve protection has not been adjusted out of the system.

4. Secure the Allen head screw and tighten the hex nut retainer (locking nut) **securely**.

Relief Valve (Pump Cover Removed)



Systems Descriptions

Manual Backup Pump: The manual hydraulic backup pump system is used to unfold, lower, raise and fold the platform in the event of electrical failure. See the lift posted Manual Operating Instructions Decal for operating procedures. See the Hydraulic Diagrams and Parts Listings for parts and connections.

Troubleshooting: Failure to raise or fold a platform and platform drift (failure to hold the platform in a raised or folded position) can simply be the result of the backup pump release valve not being closed tightly. Platform drift can also be the result of a loss of pump prime or contamination around the ball within the release valve seat. First, check to see that the valve stem is closed tight. If this does not solve the problem, proceed with the Priming and Flushing Procedure - outlined at right.

Priming and Flushing Procedure:

a. **Lower platform fully**.
b. Press the UP switch while simultaneously opening the backup pump release valve (turn stem counterclockwise) until the platform **does not** raise.
c. Close the release valve securely (turn clockwise) and check the backup pump operation by inserting the pump handle and stroking.

⚠WARNING

Lower platform fully before priming or flushing back-up pump release valve. Failure to do so may result in serious bodily injury and/or property damage.

Cylinders: It is advisable to replace a cylinder rather than try to repair it, although seal kits are available. Minute scratches and nicks need to be repaired with proper equipment. Failure to do so will cause premature failure of new seals.

⚠WARNING

Replace cylinder if tests indicate failure. Failure to do so may result in serious bodily injury and/or property damage.

⚠WARNING

Whenever replacing a hydraulic cylinder or seals and/or testing for oil leakage, lower platform fully. Failure to do so may result in serious bodily injury and/or property damage.

Troubleshooting: Replacement of the cylinder(s) is unnecessary unless platform drift (failure to hold the platform in a raised or folded position) occurs or a loaded platform fails to raise.

The cylinder should be replaced if **any** external leakage from the rod seals is visible. The cylinder should also be replaced if there is **any** internal leakage from the piston seals. Even the slightest amount of drift could result in a potentially hazardous situation. The following procedures will indicate internal leakage.

Internal Leakage Test No. 1:

a. **Read warnings at left!** Lower platform fully.
b. Raise platform fully, fold and continue to press FOLD switch 5 to 10 seconds after fully folded.
c. If a **continuous flow** of oil from a cylinder (piston end) is visible in the clear (yellow) return line during the retract mode, replace the cylinder. **Black Return Line:** Remove reservoir cap to look for **continuous flow** of oil. **Note:** Movement of a slight amount of seal lubrication oil or air bubbles in the return line is normal.

Note: If oil leakage is not visible when conducting Internal Leakage Test No. 1, but the platform drifts (**any** measurable descent whatsoever), perform Internal Leakage Test No. 2.

Internal Leakage Test No. 2:

a. Place load (200 to 250 lbs.) on platform.
b. Raise loaded platform fully.
c. Allow the loaded platform to set in the raised position overnight or longer.
d. If **any** measurable descent is visible, refer to Section 8.40 of the Troubleshooting Diagnosis Chart for remedies.

Troubleshooting Diagnosis Chart

⚠WARNING

Troubleshooting and repair procedures must be performed as specified by an authorized service technician only. Failure to do so may result in serious bodily injury and/or property damage.

If a problem occurs with your lift, **discontinue operation immediately! Do not** attempt repairs yourself. Contact your sales representative or call The Braun Corporation at 1-800-THE LIFT. One of our national Product Support representatives will direct you to an authorized service technician who will inspect your lift.

The cause of the problem can be determined by locating the lift function and related symptom in the Troubleshooting Diagnosis Charts. The specific cause and remedy can then be determined by process of elimination. A Wiring Diagram, Electrical Schematic, Hydraulic Diagram and Hydraulic Schematic are provided to aid in troubleshooting.

A Repair Parts section with exploded views and corresponding parts lists is also provided. Correct the problem if possible. If the problem continues, contact The Braun Corporation.

FUNCTION	SYMPTOM	POSSIBLE CAUSE	REMEDY
1.00 NO OPERATION	**1.10 No Power To Lift (Circuit Problem)**	1.11 Circuit Sentry (100 ampere circuit breaker) tripped. Note: 70 ampere circuit sentry for 24 volt systems.	Fix overload and reset-turn RESET lever
		1.12 Battery terminals dirty	Clean and tighten
		1.13 Chassis ground connection (mounting bolt ground)	Clean and tighten. See **Chassis Ground Notice** on page 15.
		1.14 Battery defective	Replace
		1.15 Battery discharged	Charge battery
		1.16 Circuit Sentry defective (See 1.11 note)	Replace
		1.17 Power cable	Check for loose terminals or broken wire
	1.20 Power to Lift But No Operation (Switches)	1.21 Interlock (optional) circuit incomplete	Correct or replace
		1.22 5 ampere circuit breaker tripped or defective	Reset or replace
		1.23 Loose connection	Clean and tighten
		1.24 Broken wire	Repair
		1.25 Wire terminal	Crimp tightly to wire
		1.26 Solenoid defective	Replace
		1.27 Switch defective	Replace
2.00 PLATFORM UNFOLD (Out)	**2.10 No Operation**	2.11 See 1.00	
		2.12 Unfold/Down Microswitch out of adjustment or defective	Adjust or replace. *See Microswitches in Systems Descriptions for details (pages 36-39)*
		2.13 Unfold/Down Microswitch harness disconnected, damaged or otherwise defective	Connect, repair or replace
		2.14 Cylinder flow control valve(s) defective	Replace
		2.15 Unfold, Bridging and/or Down solenoid/valves: Poor connection, bent shaft or contaminated filter	Check for loose connection or replace. *See Systems Descriptions for Quick-Check Procedure*
		2.16 Lift platform has drifted against Lift-Tite™ latches	Press Fold switch until lift is fully folded, then unfold platform
	2.20 Faulty or Sluggish Operation	2.21 Lack of lubrication (parallel arm pivot pins, rotating pivot slide arm pivot pins, platform pivot pin, handrail pivot pins and platform fold axles)	Replace worn bushings and/or pins. Lubricate platform pivot pin and fold axles. *See Maintenance and Lubrication Schedule and Diagram*

Troubleshooting Diagnosis Chart

FUNCTION	SYMPTOM	POSSIBLE CAUSE	REMEDY
2.00 PLATFORM UNFOLD (Out)	**2.20 Faulty or Sluggish Operation**	2.22 Misalignment or damage to: • Parallel arms and/or pivot pins • Rotating pivot slide arms and/ or pivot pins • Handrails and/or pivot pins • Platform fold axles • Platform pivot pins/lower fold arms	Correct/Replace/Lubricate. *See Maintenance and Lubrication Schedule and Diagram*
		2.23 Mechanical binding	Check and correct
		2.24 Misalignment of towers (upright supports)	Correct. *See Lift Positioning (pages 10-12 and Positioning and Clearance Checklist (pages 22 and 23).*
		2.25 Gas spring(s) weak, loose or defective	Correct or replace
		2.26 Worn or missing unfold gas springs	Replace
		2.27 Restriction in hydraulic lines	Check for contamination or kinks - correct or replace
		2.28 Hydraulic fluid too thick due to cold climate	Thin with Diesel fuel - 2 T. Change in spring. *See Systems Descriptions for full-time cold climate specifications*
		2.29 Flow control valve(s) restricted	Replace
	2.30 Faulty Floor Level Switching	2.31 See 2.13	
3.00 Platform DOWN	**3.10 No Operation**	3.11 Platform not unfolded	Unfold platform
		3.12 See 1.20	
		3.13 Down and/or Bridge solenoid/ valves: Poor connection, bent shaft or contaminated filter	Check for loose connection or replace. *See Systems Descriptions for Quick-Check Procedure*
		3.14 See 2.12, 2.13, 2.14 and 2.23	
		3.15 Bridging relay defective	Replace
		3.16 See 4.12, 4.13	
	3.20 Faulty or Sluggish Operation	3.21 Unfold solenoid/valve: Poor connection or bent shaft	Check for loose connection or replace
		3.22 See 2.21, 2.22, 2.23, 2.24, 2.27, 2.28 and 2.29	
4.00 Bridging	**4.10 No Operation**	4.11 Bridging solenoid/valve stuck open due to contamination or otherwise defective	Replace
		4.12 Bridging microswitch out of adjustment or defective	Adjust or replace.
		4.13 Bridging microswitch harness disconnected, damaged or otherwise defective	Connect, repair or replace
		4.14 See 3.15	
5.00 ROLL STOP LATCH Faulty Unlatching	**5.10 Faulty Unlatching**	5.11 Platform not fully lowered	Lower platform
		5.12 Obstruction under platform preventing latch foot from contacting surface	Remove obstruction or lower platform in different location (level surface)
		5.13 Roll stop damaged (bent, deformed or misaligned)	Correct or replace.
		5.14 Latch bent, deformed or misaligned	Correct or replace
		5.15 Latch pivot pin adapters damaged or missing	Correct or replace
		5.16 Lack of lubrication	Lubricate — *See Maintenance and Lubrication Schedule and Diagram*

continued

continued

Troubleshooting Diagnosis Chart

FUNCTION	SYMPTOM	POSSIBLE CAUSE	REMEDY
continued	*continued*		
6.00 OUTBOARD ROLL STOP	**6.10 Faulty Unfold**	6.11 See 5.11, 5.12, 5.13, 5.14 and 5.15	
		6.12 Roll stop cylinder compression spring loose, weak or defective	Adjust and tighten Allen head lock collar or replace spring.
		6.13 Roll stop cylinder rod length	Adjust (loosen jam nut and adjust cylinder rod as detailed on page 25). **Note:** It may be necessary to release spring tension.
			Replace bushings and/or pins
		6.14 Worn bushings and/or pins	Check and correct
		6.15 Mechanical binding	Correct or replace
		6.16 Roll stop lever damaged or mounting hardware missing	
		6.17 See 1.00 and 2.15 also	Check for loose connection or replace.
		6.18 Down Solenoid/Valve: Poor connection, bent shaft or contaminated filter	*See Systems Descriptions for Quick Check Procedure*
	6.20 Faulty Fold	6.21 Roll stop cylinder leaks	Replace cylinder
		6.22 Roll stop cylinder breather plugged	Correct
		6.23 Excessive roll stop cylinder drag	
		6.24 See 1.00, 6.10 and 8.00	Replace cylinder
7.00 ROLL STOP LATCH Faulty Latching	**7.10 Faulty Latching**	7.11 Platform not raised 2" above the ground level	Raise platform 2" minimum.
		7.12 Damaged, detached or missing latch spring	Correct or replace
		7.13 See 5.13, 5.14, 5.15, 5.16, 6.12 and 6.13	
8.00 PLATFORM UP	**8.10 No Operation**	8.11 Backup pump release valve not closed	Close valve
		8.12 See 1.00	
		8.13 Up/Fold microswitch out of adjustment or defective	Adjust or replace. *See Microswitches in Systems Descriptions for details (pages 36-39)*
		8.14 Microswitch harness disconnected or damaged	Connect, repair or replace
		8.15 Up/Fold solenoid not functioning	Check for loose connection or replace
		8.16 Motor brushes worn	Replace pump motor
	8.20 Motor Runs But Doesn't Lift	8.21 See 8.11	
		8.22 Low hydraulic fluid supply. **Note:** Fluid should be changed if there is visible contamination. Inspect the hydraulic system for leaks if fluid level is low.	Add Dextron III transmission fluid. Check oil level with **platform fully lowered** and **roll stop fully unfolded**. *See Systems Descriptions for details*
		8.23 Leak in hydraulic system	Repair
		8.24 Cylinder(s) leak	Repair or replace — *See Systems Descriptions for details.*
		8.25 Down solenoid/valve stuck open due to contamination or otherwise defective	Replace
	8.30 Sluggish Operation	8.31 Relief valve set too low	Factory set at 2100 psi. *See Systems Descriptions for adjustment procedure*
		8.32 Excessive load	Remove excess weight
		8.33 See 3.20, 8.16 and 8.20	

Troubleshooting Diagnosis Chart

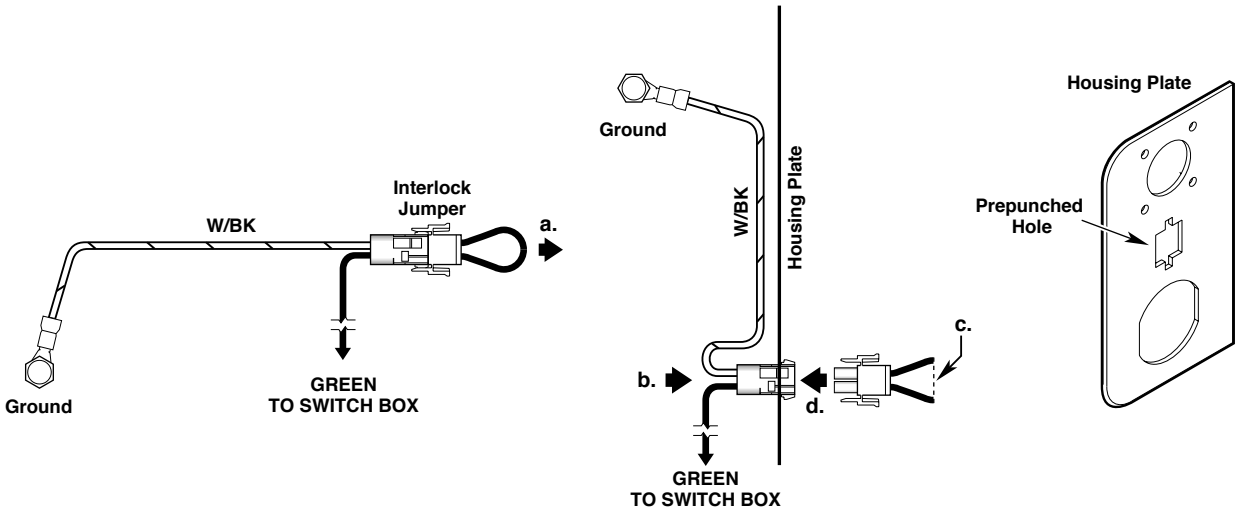
FUNCTION	SYMPTOM	POSSIBLE CAUSE	REMEDY
8.00 PLATFORM UP	**8.40 Platform Drifts Down**	8.41 Backup pump release valve contamination	Flush clean or replace. *See Systems Descriptions for Priming and Flushing procedure*
		8.42 See 8.11 and 8.20	
	8.50 Faulty Floor Level Switching	8.51 See 8.13	
	8.60 Front and Rear Parallel Arms Not "In-Time" (out-of-sync)	8.61 See 2.22, 2.23, 2.24, 2.26, 2.27 and 2.29	
		8.62 Air in hydraulic lines	Check hydraulic fluid level and add Dextron III transmission fluid if required. Cycle lift 10 times pausing a few moments between cycles to allow air to move out of lines. **Note:** Check oil level with **platform fully lowered** and **roll stop fully unfolded**. *See Systems Descriptions for details.*
9.00 PLATFORM FOLD (In)	**9.10 No Operation**	9.11 Platform not fully raised	Raise platform
		9.12 See 1.00 and 8.25	
		9.13 Up/Fold Microswitch defective or out of adjustment	Adjust or replace. *See Microswitches in Systems Descriptions for details (pages 36-39)*
		9.14 Platform Hydraulic Pressure Sensor Switch out of adjustment or defective	Adjust or replace. *See Platform Hydraulic Pressure Sensor Switch in Systems Descriptions for details (page 41)*
		9.15 Microswitch or hydraulic pressure switch harness(s) disconnected, damaged or otherwise defective	Connect, repair or replace
	9.20 Motor Runs But Doesn't Fold	9.21 See 8.20	
	9.30 Faulty or Sluggish Operation	9.31 See 2.21, 2.22, 2.23, 2.24, 2.26, 2.27, 2.28, 2.29, 9.13 and 9.14	
	9.40 Platform Drifts Down (Out)	9.41 See 8.40	
10.00 MANUAL BACK-UP PUMP	**10.10 Up** (Faulty Operation)	10.11 See 8.11, 8.22, 8.24 and 8.41	
		10.12 Lost prime	Prime. *See Systems Descriptions for Priming and Flushing procedure*
		10.13 Air leak at backup pump to pump interface (O-rings)	Check tightness or leaks
	10.20 Down (Faulty Operation)	10.21 See 3.20	
		10.22 Lift platform has drifted against Lift-Tite™ latches	Pump lift platform fully up then release

continued

Troubleshooting Diagnosis Chart

FUNCTION	SYMPTOM	POSSIBLE CAUSE	REMEDY
continued	*continued*		
11.00 HANDRAILS	**11.10 Faulty Operation**	11.11 Slide support arm guide bolts improperly adjusted (tightness), missing or damaged	Correct or replace
		11.12 Worn bushings/pivot pins	Replace
		11.13 Pivot pins misaligned (snap ring missing) or otherwise damaged	Correct or replace
		11.14 Handrail bent, deformed or otherwise damaged	Correct or replace
12.00 Lift-Tite™ Latches	**12.10 Faulty Operation**	12.11 Defective dampening springs	Replace dampening springs

Lift Interlock Installation

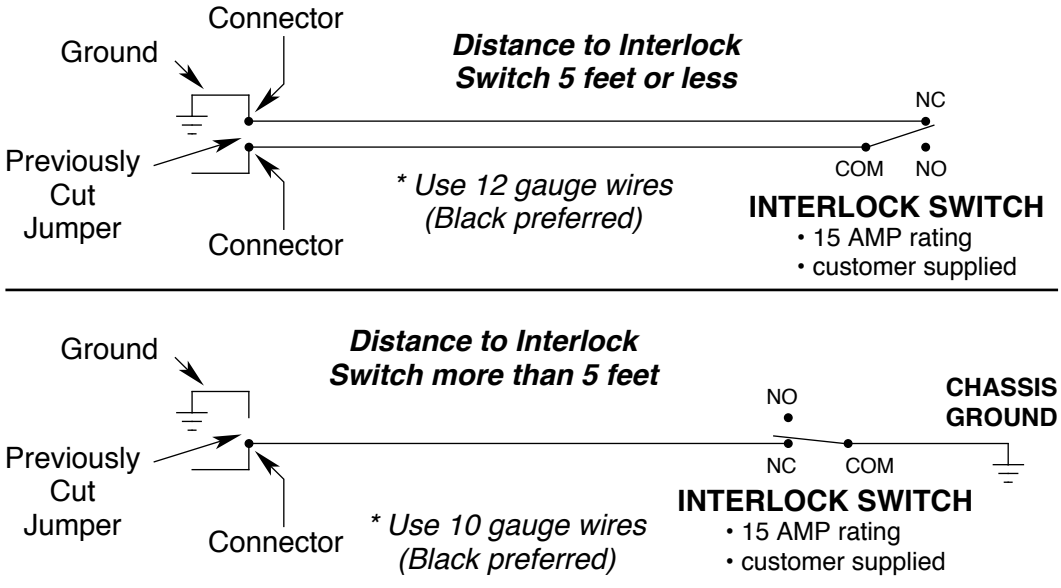


Interlock Installation Instructions

1. To connect remote interlock switch:
   a. Remove (disconnect) jumper male plug.
   b. Snap plastic female socket into prepunched housing plate.
   c. Cut jumper wire and connect remote ground source.
   See Specifications below.
   d. Reconnect male plug and female socket.

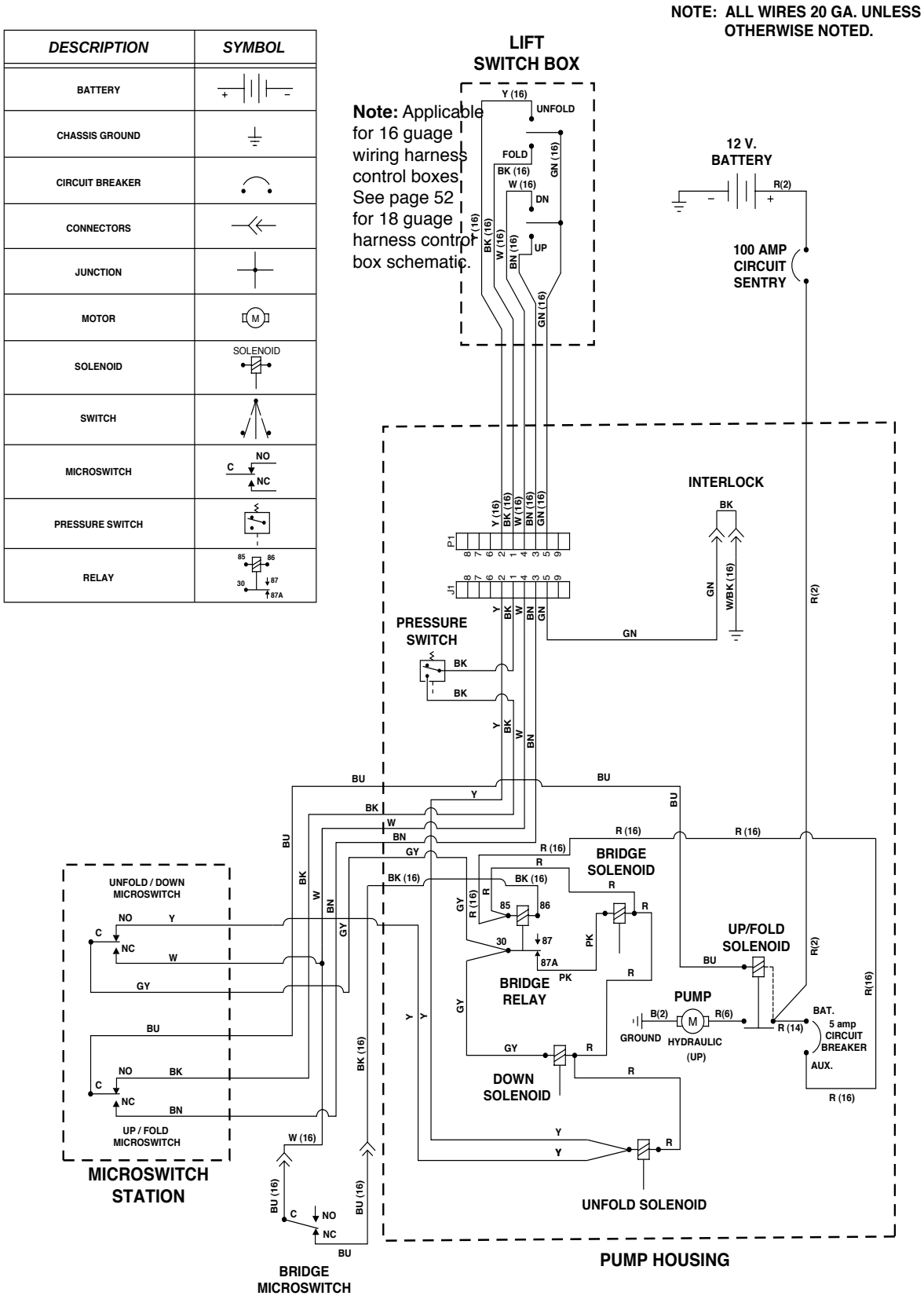
2. With lift unoccupied, test all lift functions to ensure proper interlock installation *(with interlock switch opened and closed).*

Specifications



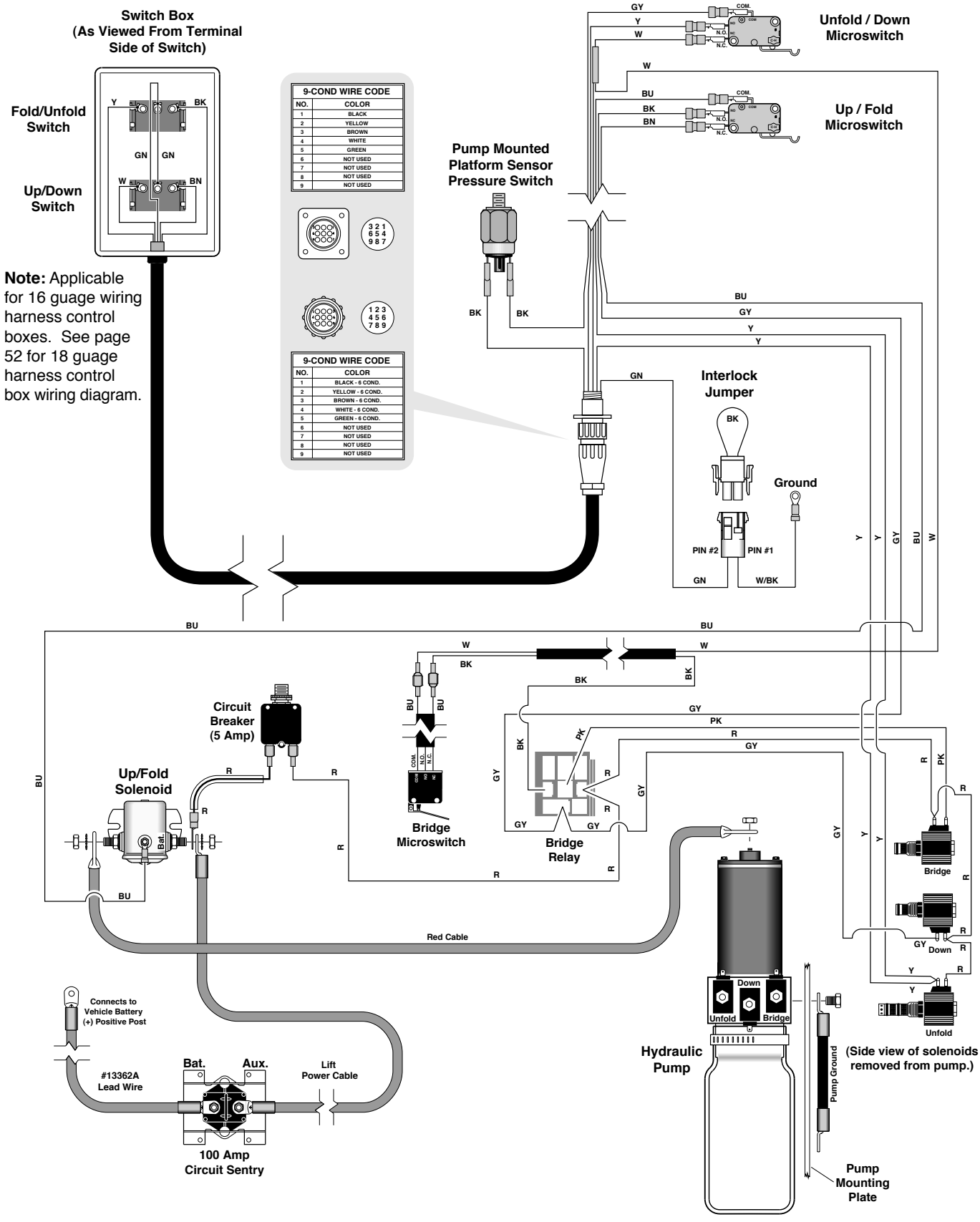
Lift Electrical Schematic

Note: Shown with lift in stowed position.

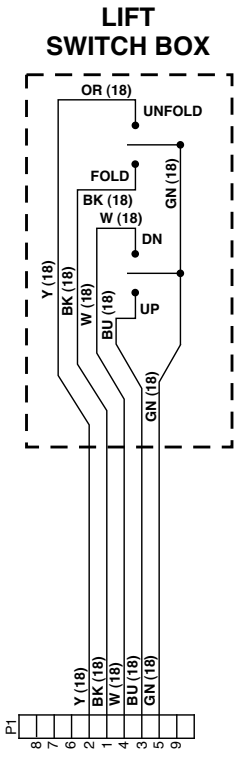


Lift Wiring Diagram

Note: *Shown with lift in stowed position.*



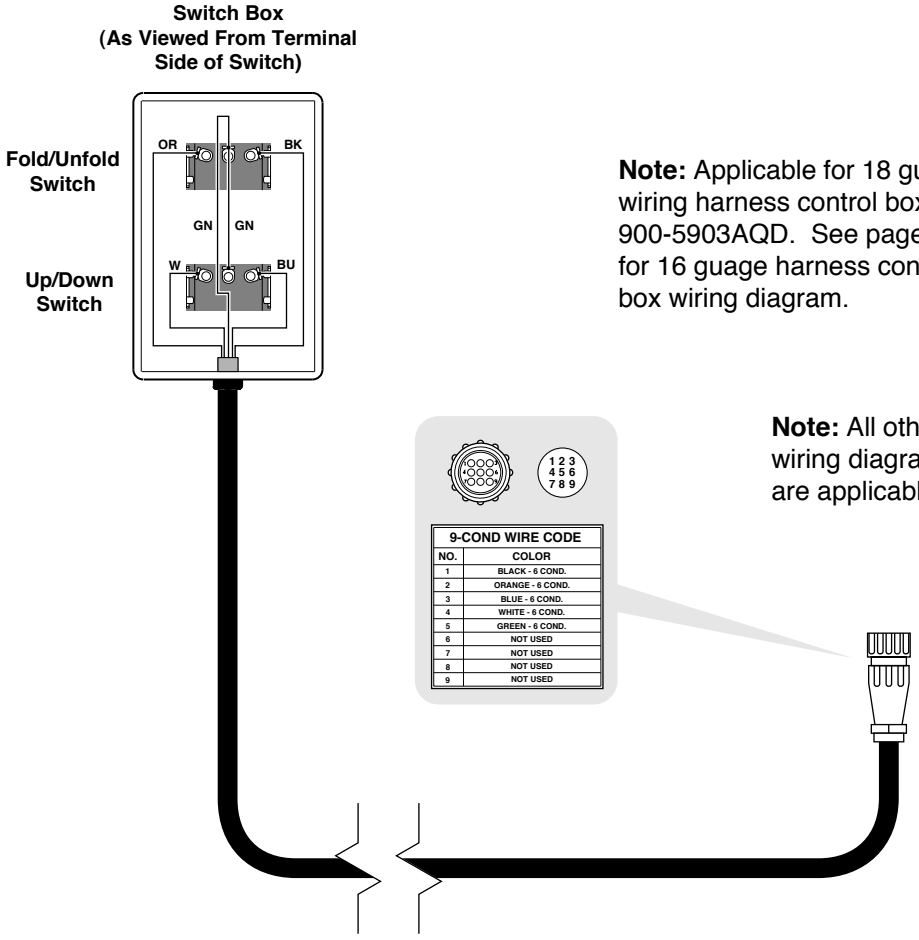
18 Guage Lift Control Box Electrical Schematic



Note: Applicable for 18 guage wiring harness control box 900-5903AQD. See page 50 for 16 guage harness control box schematic.

Note: All other elements of schematic on page 50 are applicable for all lifts.

18 Guage Lift Control Box Wiring Diagram

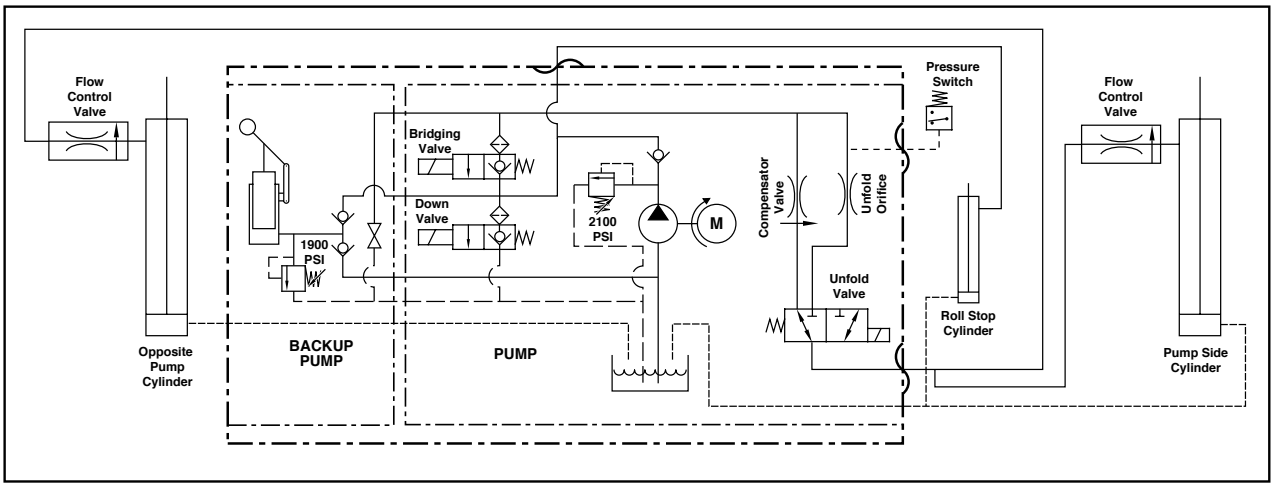


Note: Applicable for 18 guage wiring harness control box 900-5903AQD. See page 51 for 16 guage harness control box wiring diagram.

Note: All other elements of wiring diagram on page 51 are applicable for all lifts.

Hydraulic Schematic

Description	Symbol	Description	Symbol
Pump, Fixed Displacement		Pressure Compensated Flow Control	
Pump Motor	M	2 Way 2 Position Solenoid Valve	
Backup Pump		3 Way 2 Position Solenoid Valve	
Cylinder, Single Acting		Relief Valve	
Check Valve		Pressure Switch	
Unfold Orifice		Filter Screen	
Manual Shutoff Valve		Reservoir, Vented	
Hydraulic Port			

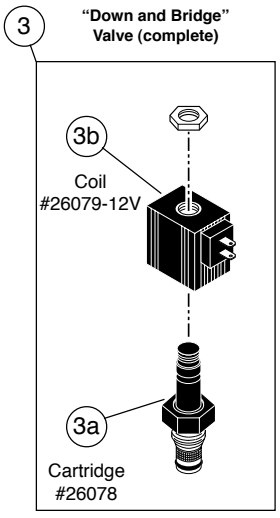


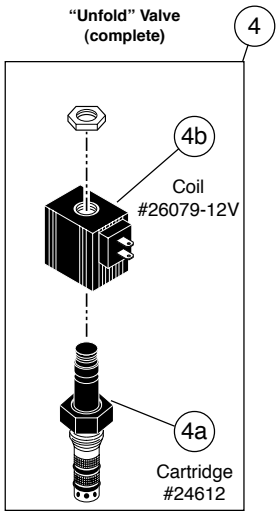
Rear Pump Hydraulics Parts List

			L915	L916	L917	L918	L919
Item	Qty.	Description	L915IB	L916IB	L917IB	L918IB	L919IB
1	1	Pump Assy. (M268) Bridging with #26578 Fitting	25597A12V-04	25597A12V-04	25597A12V-04	25597A12V-04	25597A12V-04
2	1	Motor, Pump - 12 Volt	14785-IS	14785-IS	14785-IS	14785-IS	14785-IS
3	2	Valve Assembly, “Down and Bridge” (complete)	26076-12V	26076-12V	26076-12V	26076-12V	26076-12V
3a	2	Cartridge (only), Valve, “Down and Bridge” (shown below)	26078	26078	26078	26078	26078
3b	1	Coil (only), Valve, “Down and Bridge” (shown below)	26079-12V	26079-12V	26079-12V	26079-12V	26079-12V
4	1	Valve Assembly, “Unfold” (complete)	26075-12V	26075-12V	26075-12V	26075-12V	26075-12V
4a	1	Cartridge (only), Valve, “Unfold” (shown below)	24612	24612	24612	24612	24612
4b	1	Coil (only), Valve, “Unfold” (shown below)	26079-12V	26079-12V	26079-12V	26079-12V	26079-12V
5	1	Clamp, Reservoir-H-48	17069	17069	17069	17069	17069
6	1	Cap, Reservoir Filler	16935	16935	16935	16935	16935
7	2	Connector, Plastic "Y", 1/8" O.D.	18877	18877	18877	18877	18877
8	1	Hand Pump (Back-up) with O-Rings (Item 9)	26074	26074	26074	26074	26074
9	4	O-Ring (only), Hand Pump Mounting	17351	17351	17351	17351	17351
10	3	Screw, 1/4"-20 x 2-1/4", Allen Head	26080	26080	26080	26080	26080
11	1	Handle with Grip	17206A	17206A	17206A	17206A	17206A
12	4	Fitting, Male 7/16-20 SAE O-Ring to Male 7/16-20 JIC 37°	24504	24504	24504	24504	24504
13	1	Elbow, 7/16-20 JIC 37° Female Swivel (1)-7/16-20 JIC 37° Male (2)	26579	26579	26579	26579	26579
14	1	Elbow, 65° - Male 7/16-20 SAE O-Ring to 7/16-20 SAE O-Ring Boss	26578	26578	26578	26578	26578
15	1	Switch, Pressure 1600 PSI, 7/16-20 SAE O-Ring Male	26577	26577	26577	26577	26577
16	2	Cylinder ✓	C1514.3-9407	C1514.3-9408	C1514.3-9408	C1514.3-9407	C1514.3-9408
17	2	Elbow, 90°, 7/16-20 SAE O-Ring Male	26576	26576	26576	26576	26576
18	2	Valve, Pressure Compensator - 1 GPM, 7/16-20 SAE O-Ring Boss Port	26575	26575	26575	26575	26575
19	1	Hose Assembly, 1/8" (Opposite-Pump-Side)	16004A-076	16004A-079	16004A-082	16004A-079	16004A-083
20	1	Hose Assembly, 1/8" (Pump-Side)	16004A-038	16004A-042	16004A-042	16004A-038	16004A-042
21	3	Elbow, 90° 1/4" NPT Male to 1/4" Barbed	15150	15150	15150	15150	15150
22	1	Hose, Therm. Plastic-Black, 1/8" I.D.	23742R* (68")	23742R* (68")	23742R* (68")	23742R* (68")	23742R* (68")
23	1	Hose, Therm. Plastic-Black, 1/8" I.D.	23742R* (30")	23742R* (30")	23742R* (30")	23742R* (30")	23742R* (30")
24	1	Cylinder Assembly, Roll Stop - 9/16-18 SAE O-Ring Boss Port	25309-05A	25309-05A	25309-05A	25309-05A	25309-05A
25	1	Fitting, 90°-9/16-18 SAE O-Ring Male to 7/16-20 JIC 37° Male	87622	87622	87622	87622	87622
26	1	Hose Assembly, 3/16" with (2) Guards - Roll Stop	915-2601-125	915-2601-135	915-2601-138	915-2601-128	915-2601-139
27	1	Hose, Therm. Plastic-Black, 1/8" I.D.	23742R* (133")	23742R* (133")	23742R* (133")	23742R* (133")	23742R* (133")

✓ **Seal Kits:** If repairing a cylinder, order Seal Kit #1500-0500**P**.

* Raw material items ordered and priced per inch (order specified length).



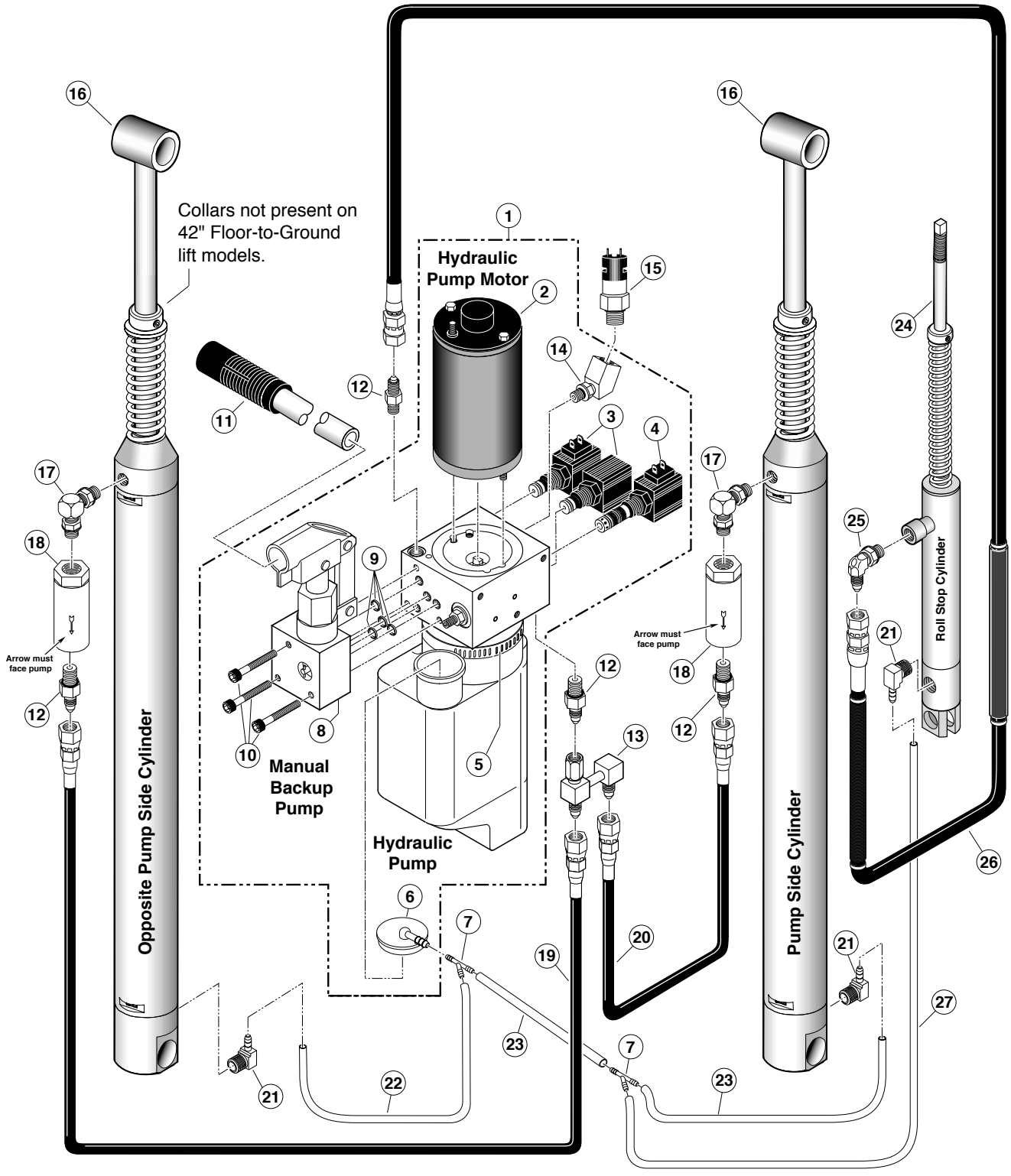


Rear Pump Hydraulics Diagram

Note: See pages 56 and 57 for **Front Pump** Hydraulic Diagram and Parts List.

Note: See page 53 for L915 Hydraulic Schematic.

Note: Illustrations depict components as equipped when specified lift series was in production. Replacement components such as hose assemblies will typically reflect the most current configuration.

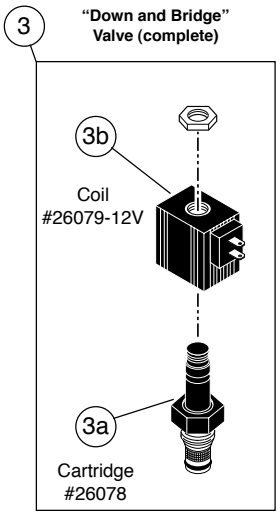


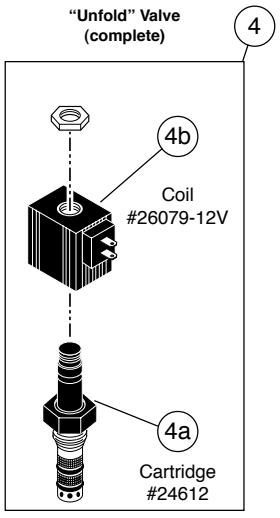
Front Pump Hydraulics Parts List

Item	Qty.	Description	L915F L915FIB	L916F L916FIB	L917F L917FIB	L918F L918FIB	L919F L919FIB
1	1	Pump Assy. (M268) Bridging with #26578 Fitting	25597A12V-04	25597A12V-04	25597A12V-04	25597A12V-04	25597A12V-04
2	1	Motor, Pump - 12 Volt	14785-IS	14785-IS	14785-IS	14785-IS	14785-IS
3	2	Valve Assembly, “Down and Bridge” (complete)	26076-12V	26076-12V	26076-12V	26076-12V	26076-12V
3a	2	Cartridge (only), Valve, “Down and Bridge” (shown below)	26078	26078	26078	26078	26078
3b	1	Coil (only), Valve, “Down and Bridge” (shown below)	26079-12V	26079-12V	26079-12V	26079-12V	26079-12V
4	1	Valve Assembly, “Unfold” (complete)	26075-12V	26075-12V	26075-12V	26075-12V	26075-12V
4a	1	Cartridge (only), Valve, “Unfold” (shown below)	24612	24612	24612	24612	24612
4b	1	Coil (only), Valve, “Unfold” (shown below)	26079-12V	26079-12V	26079-12V	26079-12V	26079-12V
5	1	Clamp, Reservoir-H-48	17069	17069	17069	17069	17069
6	1	Cap, Reservoir Filler	16935	16935	16935	16935	16935
7	2	Connector, Plastic "Y", 1/8" O.D.	18877	18877	18877	18877	18877
8	1	Hand Pump (Back-up) with O-Rings (Item 9)	26074	26074	26074	26074	26074
9	4	O-Ring (only), Hand Pump Mounting	17351	17351	17351	17351	17351
10	3	Screw, 1/4"-20 x 2-1/4", Allen Head	26080	26080	26080	26080	26080
11	1	Handle with Grip	17206A	17206A	17206A	17206A	17206A
12	4	Fitting, Male 7/16-20 SAE O-Ring to Male 7/16-20 JIC 37°	24504	24504	24504	24504	24504
13	1	Elbow, 7/16-20 JIC 37° Female Swivel (1)-7/16-20 JIC 37° Male (2)	26579	26579	26579	26579	26579
14	1	Elbow, 65° - Male 7/16-20 SAE O-Ring to 7/16-20 SAE O-Ring Boss	26578	26578	26578	26578	26578
15	1	Switch, Pressure 1600 PSI, 7/16-20 SAE O-Ring Male	26577	26577	26577	26577	26577
16	2	Cylinder ✓	C1514.3-9407	C1514.3-9408	C1514.3-9408	C1514.3-9407	C1514.3-9408
17	2	Elbow, 90°, 7/16-20 SAE O-Ring Male	26576	26576	26576	26576	26576
18	2	Valve, Pressure Compensator - 1 GPM, 7/16-20 SAE O-Ring Boss Port	26575	26575	26575	26575	26575
19	1	Hose Assembly, 1/8" (Opposite-Pump-Side)	16004A-076	16004A-079	16004A-082	16004A-081	16004A-083
20	1	Hose Assembly, 1/8" (Pump-Side)	16004A-038	16004A-042	16004A-042	16004A-038	16004A-042
21	3	Elbow, 90° 1/4" NPT Male to 1/4" Barbed	15150	15150	15150	15150	15150
22	1	Hose, Therm. Plastic-Black, 1/8" I.D.	23742R* (68")	23742R* (68")	23742R* (68")	23742R* (68")	23742R* (68")
23	1	Hose, Therm. Plastic-Black, 1/8" I.D.	23742R* (30")	23742R* (30")	23742R* (30")	23742R* (30")	23742R* (30")
24	1	Cylinder Assembly, Roll Stop - 9/16-18 SAE O-Ring Boss Port	25309-05A	25309-05A	25309-05A	25309-05A	25309-05A
25	1	Fitting, 90°-9/16-18 SAE O-Ring Male to 7/16-20 JIC 37° Male	87622	87622	87622	87622	87622
26	1	Hose Assembly, 3/16” with (2) Guards (Lower)	915-5602-81	915-5602-92.5	915-5602-92.5	915-5602-81	915-5602-91
27	1	Hose Assembly, 3/16" (Upper)	915-5603-83.5	915-5603-83.5	915-5603-86.5	915-5603-86.5	915-5603-87.5
28	1	Hose, Therm. Plastic-Black, 1/8" I.D.	23742R* (133")	23742R* (133")	23742R* (133")	23742R* (133")	23742R* (133")

✓ **Seal Kits:** If repairing a cylinder, order Seal Kit #1500-0500**P**.

* Raw material items ordered and priced per inch (order specified length).



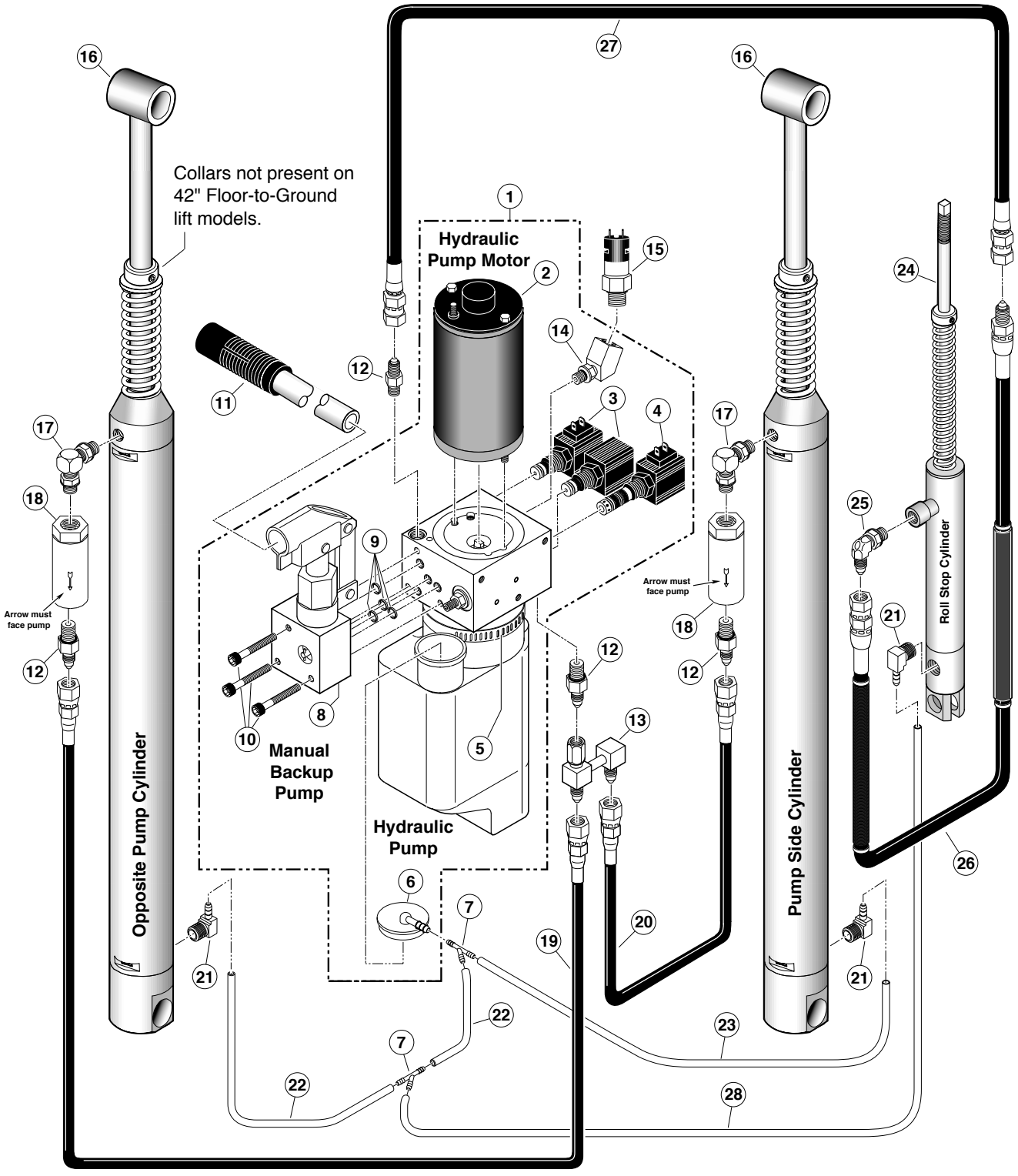


Front Pump Hydraulics Diagram

Note: See pages 54 and 55 for **Rear Pump** Hydraulic Diagram and Parts List.

Note: See page 53 for L915 Hydraulic Schematic.

Note: Illustrations depict components as equipped when specified lift series was in production. Replacement components such as hose assemblies will typically reflect the most current configuration.



Rear Pump Module Parts List

Item	Qty.	Description	L915, L915IB L918, L918IB Part No.	L916, L916IB L917, L917IB L919, L919IB Part No.
	1	Pump Module (complete), 12 Volt, Rear	915R4516IBQD	915R4516IBQD
1	1	Pump Assembly (M268 **with** Reservoir/**with** Backup pump)	25597A12V-04	25597A12V-04
2	2	Fitting, 7/16”-20 O-Ring Male / 7/16”-20 JIC 37° Male	24504	24504
3	1	Elbow, 7/16”-20 JIC 37° Female Swivel (1) / 7/16”-20 JIC 37° Male (2)	26579	26579
4	1	Switch, Pressure	26577	26577
5	1	Harness, Pressure Switch / Up - Fold Microswitch	25811A	25811A
6	1	**See Control Box Assembly and Harness Options** ✘ See note below		
7	1	**See Control Box Assembly and Harness Options** ✘ See note below		
8	1	Control Box, Bracket-mount (Items 9, 10 and 11) ✘ See note below	16970A	16970A
9	1	Control Box (only) ✘ See note below	16932	16932
10	1	Clip, Bracket-mount ✘ See note below	16933	16933
11	3	Screw, #6-20 x 1-1/4", Pan Head, Phillips ✘ See note below	16945	16945
12	1	Face Plate and Switch Assembly ✘ See note below	17909A-05	17909A-05
13	1	Face Plate ✘ See note below	16931-05	16931-05
14	1	Switch, S.P.D.T., Rocker (Unfold/Fold) - Orange ✘ See note below	17332	17332
15	1	Switch, S.P.D.T., Rocker (Down/Up) - Red ✘ See note below	16942	16942
16	4	Screw, #6-20 x 3/4", Pan Head, Phillips ✘ See note below	24739	24739
17	1	Strain Relief (SR 7W-2) ✘ See note below (7A, 7B and 7C only)	11352	11352
18	1	Cover, Switch Box	26798	26798
19	1	Plate, Backing / Mounting, Rear	915R4501	915R4501
20	1	Harness, Pump Module ✘ See note below	918R3914IBQD	915R3914IBQD
21	4	Snap Rivet, 1/8”, Nylon, Black	25759	25759
22	1	Jumper, Interlock ✘ See note below	15708A	15708A
23	1	Relay, 30 Amp, S.P.D.T., 12 Volt ✘ See note below	18087	18087
24	1	Pop Rivet, SD64BS, 3/16" ✘ See note below	11513	11513
25	1	Washer, #10 Flat	11541	11541
26	2	Washer, 5/16” Flat	10063	10063
27	1	Cable, Ground - 36" ✘ See note below	26161A	26161A
28	4	Bolt, 5/16”-18 x 1/2”, Nylock, Hex (3 shown) * See note below	10012	10012
29	1	Solenoid, Up	10565	10565
30	2	Screw, #10-24 x 1/2”, Button Head, Allen	25842	25842
31	2	Nut, #10-24 with Lock Washer	17388	17388
32	1	Lead Wire Assembly, #6 Gauge Red	915-3506A	915-3506A
33	1	Harness, Solenoid / Microswitch	25810A	25810A
34	1	Cable, Pump Module Power Feed, #2 Gauge Red	26082A	26082A
35	1	Harness, Up Solenoid / Circuit Breaker	25809A	25809A
36	1	Circuit Breaker, 5 Amp, Manual Reset	25736	25736
37	1	Stud, Power Feed	26084	26084
38	1	Cable, Lift Power, 37' with Loom ✘ See note below	205-0712-37	205-0712-37
39	1	Rubber Boot, Red ✘ See note below	82046	82046
40	1	Clip, Cable, 1/2”, Plastic ✘ See note below	10092	10092
41	1	Snap Rivet, 3/16”, Nylon, Black ✘ See note below	25973	25973

Control Box Assembly and Harness Options

Item	Qty.	Description	Part No.
6A	1	Control Box Assembly (with **Standard** Quick Disconnect Harness) ✘ See Note Below	900-0903AQD
6B	1	Control Box Assembly (with **Armored** Quick Disconnect Harness) ✘ See Note Below	900-0903AQDA
6C	1	Control Box Assembly (with **Coiled** Quick Disconnect Harness) ✘ See Note Below	900-0903AQDC
6D	1	Control Box Assembly (with **7' Long, 18 Ga.**, Quick Disconnect Harness) ✘ See Note Below (**not shown**)	900-5903AQD
7A	1	Harness, **Standard**, Quick Disconnect (**without control box**) ✘ See Note Below	900-0902AQD
7B	1	Harness, **Armored**, Quick Disconnect (**without control box**) ✘ See Note Below	900-0902AQDA
7C	1	Harness, **Coiled**, Quick Disconnect (**without control box**) ✘ See Note Below	900-0902AQDC
7D	1	Harness, **7' Long, 18 Ga.**, Quick Disconnect (**without control box**) ✘ See Note Below (**not shown**)	900-5902AQD

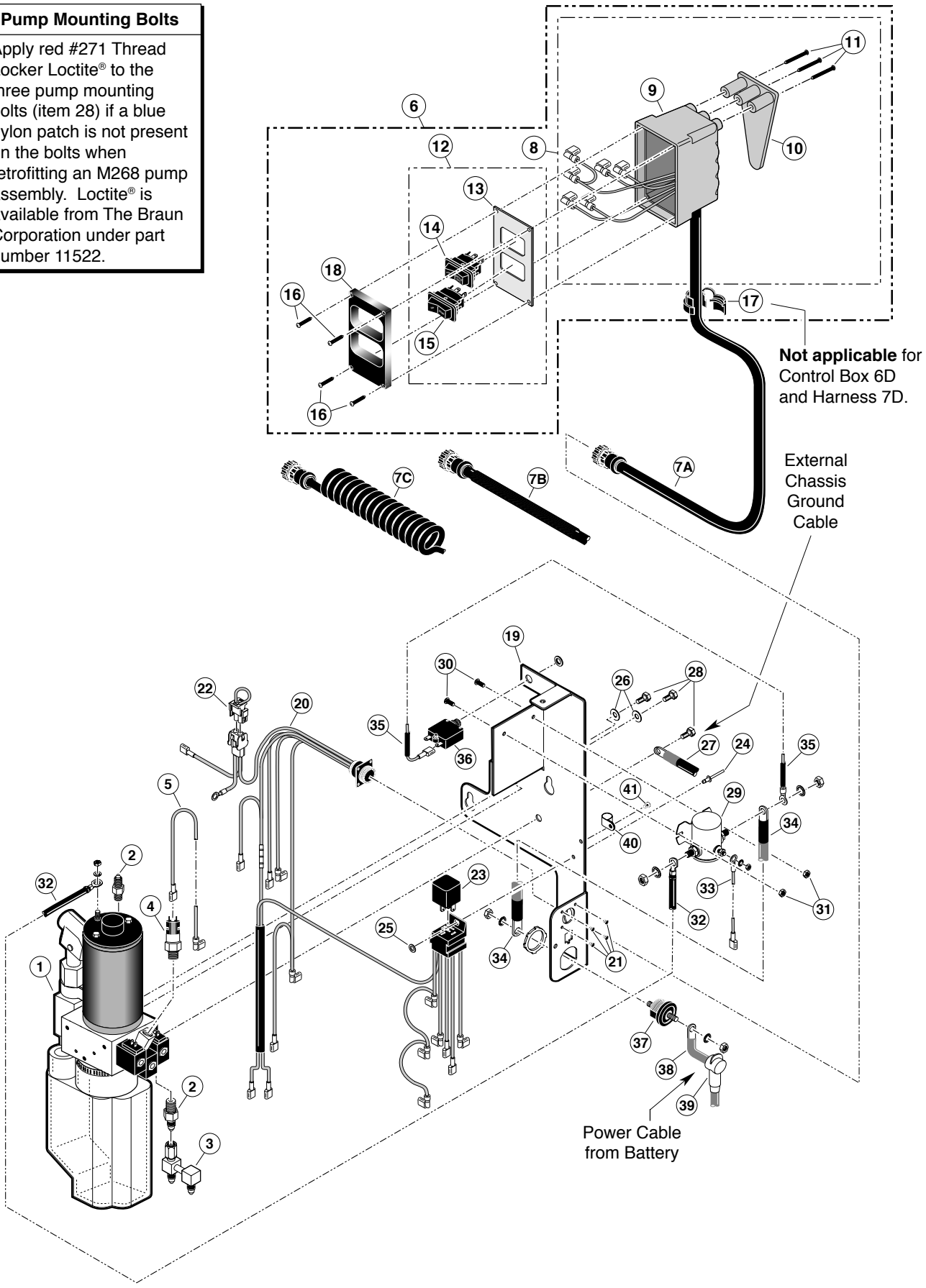
✘ Indicates items available for replacement part purposes **only**. These items **are not** included with replacement pump modules.

* Apply red #271 Thread Locker Loctite® to the three pump mounting bolts (item 28) if a blue nylon patch is not present on the bolts when retrofitting an M268 pump assembly. Loctite® is available from The Braun Corporation under part number 11522.

Rear Pump Module Diagram

Pump Mounting Bolts

Apply red #271 Thread Locker Loctite® to the three pump mounting bolts (item 28) if a blue nylon patch is not present on the bolts when retrofitting an M268 pump assembly. Loctite® is available from The Braun Corporation under part number 11522.



Front Pump Module Parts List

Item	Qty.	Description	L915F, L915FIB L918F, L918FIB Part No.	L916F, L916FIB L917F, L917FIB L919F, L919FIB Part No.
	1	Pump Module (complete), 12 Volt, Rear	915F4516IBQD-04	915F4516IBQD-04
1	1	Pump Assembly (M268 **with** Reservoir/**with** Backup pump)	25597A12V-04	25597A12V-04
2	2	Fitting, 7/16”-20 O-Ring Male / 7/16”-20 JIC 37° Male	24504	24504
3	1	Elbow, 7/16”-20 JIC 37° Female Swivel (1) / 7/16”-20 JIC 37° Male (2)	26579	26579
4	1	Switch, Pressure	26577	26577
5	1	Harness, Pressure Switch / Up - Fold Microswitch	25811A	25811A
6	1	**See Control Box Assembly and Harness Options** ✘ See note below		
7	1	**See Control Box Assembly and Harness Options** ✘ See note below		
8	1	Control Box, Bracket-mount (Items 9, 10 and 11) ✘ See note below	16970A	16970A
9	1	Control Box (only) ✘ See note below	16932	16932
10	1	Clip, Bracket-mount ✘ See note below	16933	16933
11	3	Screw, #6-20 x 1-1/4", Pan Head, Phillips ✘ See note below	16945	16945
12	1	Face Plate and Switch Assembly ✘ See note below	17909A-05	17909A-05
13	1	Face Plate ✘ See note below	16931-05	16931-05
14	1	Switch, S.P.D.T., Rocker (Unfold/Fold) - Orange ✘ See note below	17332	17332
15	1	Switch, S.P.D.T., Rocker (Down/Up) - Red ✘ See note below	16942	16942
16	4	Screw, #6-20 x 3/4", Pan Head, Phillips ✘ See note below	24739	24739
17	1	Strain Relief (SR 7W-2) ✘ See note below (7A, 7B and 7C only)	11352	11352
18	1	Cover, Switch Box	26798	26798
19	1	Plate, Backing / Mounting, Front	915F5501	915F5501
20	1	Harness, Pump Module ✘ See note below	918R3914IBQD	915R3914IBQD
21	4	Snap Rivet, 1/8”, Nylon, Black	25759	25759
22	1	Jumper, Interlock ✘ See note below	15708A	15708A
23	1	Relay, 30 Amp, S.P.D.T., 12 Volt ✘ See note below	18087	18087
24	1	Pop Rivet, SD64BS, 3/16" ✘ See note below	11513	11513
25	1	Washer, #10 Flat	11541	11541
26	2	Washer, 5/16” Flat	10063	10063
27	1	Cable, Ground - 36" ✘ See note below	26161A	26161A
28	4	Bolt, 5/16”-18 x 1/2”, Nylock, Hex (3 shown) * See note below	10012	10012
29	1	Solenoid, Up	10565	10565
30	2	Screw, #10-24 x 1/2”, Button Head, Allen	25842	25842
31	2	Nut, #10-24 with Lock Washer	17388	17388
32	1	Lead Wire Assembly, #6 Gauge Red	915-3506A	915-3506A
33	1	Harness, Solenoid / Microswitch	25810A	25810A
34	1	Cable, Pump Module Power Feed, #2 Gauge Red	26082A	26082A
35	1	Harness, Up Solenoid / Circuit Breaker	25809A	25809A
36	1	Circuit Breaker, 5 Amp, Manual Reset	25736	25736
37	1	Stud, Power Feed	26084	26084
38	1	Cable, Lift Power, 37' with Loom ✘ See note below	205-0712-37	205-0712-37
39	1	Rubber Boot, Red ✘ See note below	82046	82046

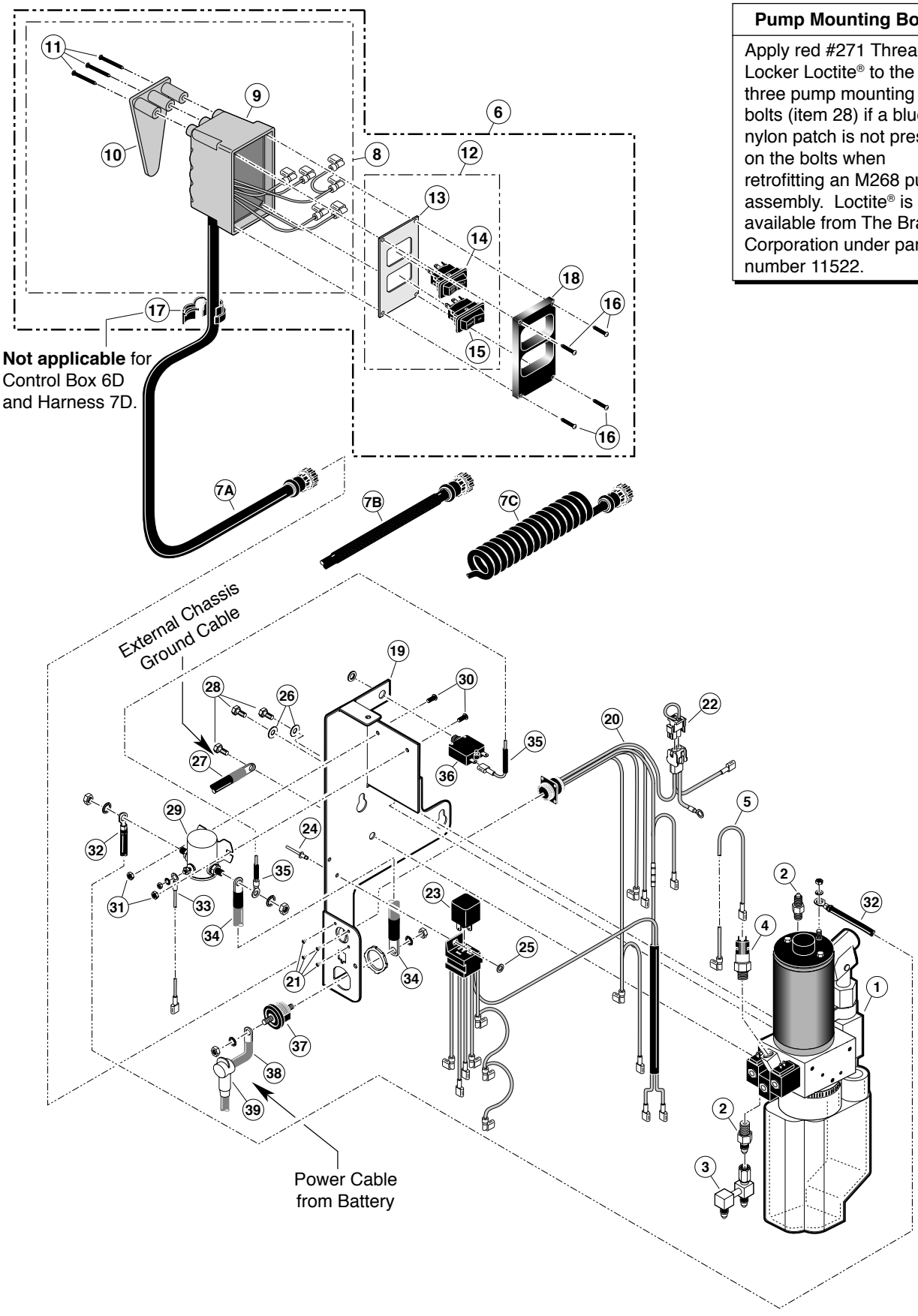
Control Box Assembly and Harness Options

Item	Qty.	Description	Part No.
6A	1	Control Box Assembly (with **Standard** Quick Disconnect Harness) ✘ See Note Below	900-0903AQD
6B	1	Control Box Assembly (with **Armored** Quick Disconnect Harness) ✘ See Note Below	900-0903AQDA
6C	1	Control Box Assembly (with **Coiled** Quick Disconnect Harness) ✘ See Note Below	900-0903AQDC
6D	1	Control Box Assembly (with **7' Long, 18 Ga.**, Quick Disconnect Harness) ✘ See Note Below (**not shown**)	900-5903AQD
7A	1	Harness, **Standard**, Quick Disconnect (**without control box**) ✘ See Note Below	900-0902AQD
7B	1	Harness, **Armored**, Quick Disconnect (**without control box**) ✘ See Note Below	900-0902AQDA
7C	1	Harness, **Coiled**, Quick Disconnect (**without control box**) ✘ See Note Below	900-0902AQDC
7D	1	Harness, **7' Long, 18 Ga.**, Quick Disconnect (**without control box**) ✘ See Note Below (**not shown**)	900-5902AQD

✘ Indicates items available for replacement part purposes **only**. These items **are not** included with replacement pump modules.

* Apply red #271 Thread Locker Loctite® to the three pump mounting bolts (item 28) if a blue nylon patch is not present on the bolts when retrofitting an M268 pump assembly. Loctite® is available from The Braun Corporation under part number 11522.

Front Pump Module Diagram



Pump Mounting Bolts

Apply red #271 Thread Locker Loctite® to the three pump mounting bolts (item 28) if a blue nylon patch is not present on the bolts when retrofitting an M268 pump assembly. Loctite® is available from The Braun Corporation under part number 11522.

42" Floor-To-Ground Automatic Inboard Roll Stop
IB Lift Models Repair Parts List

Part Numbers of Items Dedicated per Lift Model

Item	Qty.	Description	L915IB	L915FIB	L918IB	L918FIB
1	1	Base Plate Weldment	915R5142W30	915F5142W30	918R5142W33	918F5142W33
2	1	Pin, Platform Pivot	915U032430	915U032430	911-5324	911-5324
3	1	Platform Weldment	915R63050IBW	915R63050IBW	917R63350IBW	917R63350IBW
4	1	Block, Platform Stop - Bridging - Rear	25777R	915-0311	25777R	915-0311
5	1	Block, Platform Stop - Bridging - Front	915-0311	25777F	915-0311	25777F
6	1	Roll Stop (Extruded Aluminum)	915R4312-30	915R4312-30	915R4312-33	915R4312-33
7	1	Roll Stop Nose, Rubber	24603-30	24603-30	24603-33	24603-33
8	1	Bridge Plate	915U0145IB	915U0145IB	915U0148IB	915U0148IB
9	1	Plate, Backing/Mounting-Pump Module	915R4501	915F5501	915R4501	915F5501
10	1	Pump Cover, Upper	915R4513W	915F4513W	915R4513W	915F4513W
11	1	Pump Cover, Lower	915R4503	915F4503	915R4503	915F4503
12	1	Bridge Switch Assembly	25463RA	25463FA	25463RA	25463FA

Part Numbers of Items Identical on All Lift Models

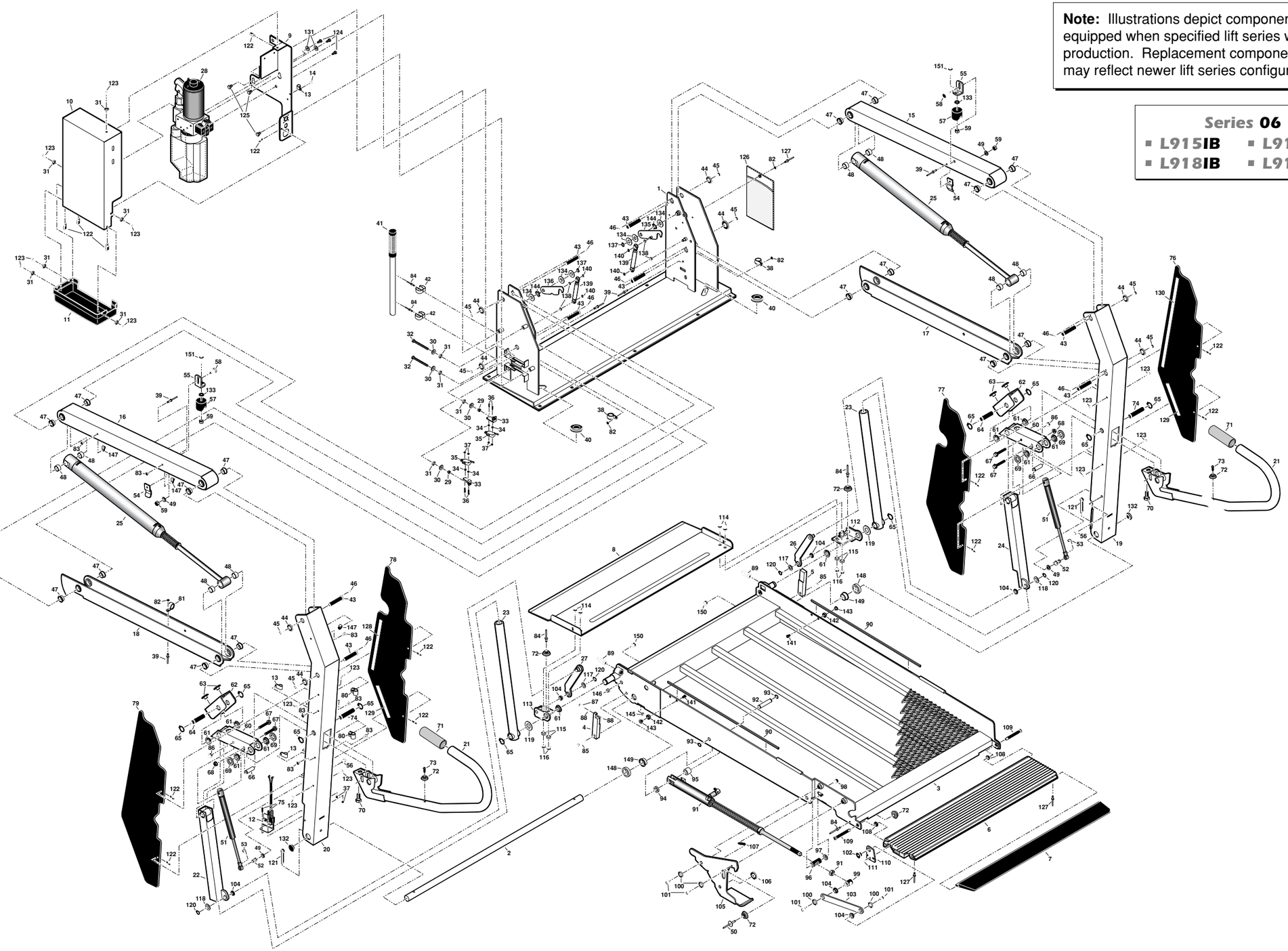
Item	Qty.	Description	Part No.
13	3	Clip, Cable, 1/2", Plastic	10092
14	1	Rivet, Snap, Black, .201" Hole x .217/.256"	25973
15A	1	Parallel Arm Weldment, Top, Front	915-0422F
15B	1	Parallel Arm Assembly, Top, Front (w/Flanged Bearings)	915-0422FA
16A	1	Parallel Arm Weldment, Top, Rear	915-0422R
16B	1	Parallel Arm Assembly, Top, Rear (w/Flanged Bearings)	915-0422RA
17A	1	Parallel Arm Weldment, Bottom, Front	915F4457
17B	1	Parallel Arm Assembly, Bottom, Front (w/Flanged Bearings)	915F4457A
18A	1	Parallel Arm Weldment, Bottom, Rear	915R4457
18B	1	Parallel Arm Assembly, Bottom, Rear (w/Flanged Bearings)	915R4457A
19	1	Vertical Channel Weldment, Front	955F2442IBW
20	1	Vertical Channel Weldment, Rear	955R2442IBW
21	2	Handrail Weldment, ADA	915-0409WIB
22	1	Tube Wmt., Upper Fold Arm, Rear	915-0425RW
23	2	Tube Wmt., Lower Fold Arm	915-0426RW
24	1	Tube Wmt., Upper Fold Arm, Front	915-2425FW
25	2	Cylinder	C1514.3-9407
26	1	Lever, Inboard Barrier, Wmt., Front	915-0404FW
27	1	Lever, Inboard Barrier, Wmt., Rear	915-0404RW
28	1	Pump Assembly (M268 with Backup Pump)	25597A12V-04
29	2	Nut, 1/4"-20, Nylock	14614
30	4	Washer, 1/4" Flat	10062
31	10	Washer, 1/4" I.D. x 11/16" x .030" - Nylon	12690
32	2	Bolt, 1/4"-20 x 3"	23976
33	2	Microswitch/Slide Adjuster Weldment	911-7126W
34	4	Bushing, Microswitch	911-7125
35	2	Microswitch, Floor Level, Cupped	23184
36	4	Screw, #4-40 x 7/8"	24009
37	6	Nut, #4-40 with Lock Washer	19537
38	2	Clamp, Insulate, 1-1/8" I.D.	20535
39	5	Rivet, Pop, SD66BS - 3/16"	14993
40	2	Grommet, Rubber, 1.25" I.D.	25916
41	1	Handle, Pump (w/Grip)	17206A
42	2	Clamp, Spring - Pump Handle	12350
43	8	Pin, Pivot Parallel Arm	917-0403
44	8	Washer, 1/2" Flat, Black Zinc	25346
45	8	Screw, 5/16-18 x 3/4", SHFS	25527
46	8	Screw, Drive #8 x 3/16" Long, Black	24439BK
47	16	Bearing, Flange, 3/4" x 3/8", 12FDU06	24011
48	8	Bushing, 3/4" I.D. x 1/2"	900-0456
49	4	Washer, 5/16", Lock	10068
50	1	Rivet, Pop, SD68BSLF-3/16"-38/50	15244
51	2	Gas Spring, Fold Arm	27356
52	2	Ball Stud, Gas Spring, 13mm x 5/16-18 Female	26236
53	2	Clip, Safety	12608
54	2	Bracket, Inner Side Panel Guide	915-0703
55	2	Bracket, Mounting, Quiet Ride	915-0392
56	2	Bolt, 5/16"-18 x 1/2", Button Hd. Socket Cap, Bk.	26281
57	2	Stow Block, Guided	28593
58	2	Bolt, 5/16"-18 x 3/4", Carriage, Black	15858BK
59	4	Nut, 5/16"-18, Hex	10058
60	2	Arm, Slide Support	915-0412
61	10	Bearing, Flange, 3/4" x 1/4"	24012
62	2	Slide, Platform, Rotate, Weldment	915-0406W
63	4	Bearing, UHMW, Flat, 1.226"	205-1760
64	2	Pin, Pivot, Lower Arm	900-0413
65	10	Ring, Snap, 3/4", External	18657
66	2	Spacer, 1/2" O.D. x .334" I.D. x 1.515"	25132
67	4	Bolt, 5/16"-18 x 2", Flange, Hex	25130
68	2	Nut, 5/16"-18, Serrated Flange	25131
69	4	Spacer, Handrail, UHMW	911-5301
70	2	Bolt, 7/16"-20 x 1", Hex	15746
71	2	Grip, Handle, Yellow	19074
72	6	Bumper, Rubber, 31/32" O.D.	10950
73	2	Screw, #8-18 x 1/2", Self-Tap, Phillips	13583
74	2	Pin, Pivot, Handrail	900-0429
75	2	Screw, #4-40 x 5/8", Round Head	14810
76	1	Cover, Plastic, Parallel Arm, Fr - w/Tape	915-3704A
77	1	Cover, Plastic, Parallel Arm, Fr, Inside - w/Tape	915-3701A
78	1	Cover, Plastic, Parallel Arm, Rr, Inside - w/Tape	915-3703A
79	1	Cover, Plastic, Parallel Arm, Rr - w/Tape	915-3702A
80	2	Clip, Cable, 7/16", Plastic	15777
81	1	Clamp, Insulated, 5/8" I.D.	84070
82	4	Washer, #10 Flat	11541
83	7	Rivet, Snap, Black, .256/.295" Thick	26362
84	3	Rivet, Pop, SD64BS - 3/16"	11513
85	2	Bolt, 5/16"-18 x 1 1/4", Low Soc. Hd. Cap Scr., Bk.	26327
86	2	Nut, 5/16"-18, Lock, Hex, Black	11387BK
87	1	Screw, #8-32 x 1", Mach. Truss Head, Black	19912BK
88	2	Nut, #8-32, Hex	10777
89	2	Screw, 1/2"-20 x 1 1/2", Set, Lock	18663
90	2	Edge Liner, 1/8" U-Molding, Yellow	24045R025.75
91	1	Cylinder, Roll Stop, Assembly	915-5318A
92	1	Pin, Platform Cylinder	915-0414
93	2	Ring, Snap, 1/2", External, .035" Thick	20946
94	1	Spacer, Flap Cylinder, .184" Thick	915-0416
95	1	Spacer, Flap Cylinder, .700" Thick	915-0415
96	1	Pivot, Roll Stop Cylinder, Front	990-0352
97	1	Washer, .4" I.D. x .810" O.D. x .12"	24536
98	1	Bolt, 3/8"-16 x 3/4", Soc. Hd. Cap Screw, Bk.	26259
99	1	Adapter, Cylinder/Roll Stop Lever	915-0344
100	4	Adapter, Cylinder/Roll Stop Lever-Out	990-0341
101	4	Screw, #10-32 x 3/8", Flat Head, Hex	24537
102	1	Pivot, Roll Stop Lever	24550
103	1	Lever, Roll Stop Latch (Assembly #915-0345A)	915-0345
104	6	Bearing, Flange, 1/2" x 1/4"	24442
105	1	Latch, Roll Stop	915-0343R
106	1	Spacer, UHMW, Latch	950-7760
107	1	Spring, 1/4" x 1" Extension w/Hooks	10774
108	2	Bearing, Flange, 3/8" x 1/4"	24028
109	2	Pin, Clevis, 3/8" x 3", Black	24932BK
110	1	Tab, Roll Stop, Flap Cylinder	915-2367
111	1	Screw, 10-32 x 5/8", Pan Head Phillips, Thd. Cut	26714
112	1	Bridge Plate Bracket, Weldment, Front	915-0431FW
113	1	Bridge Plate Bracket, Weldment, Rear	915-0431RW
114	4	Bolt, 3/8"-16 x 3/4", Flanged, Button Head	25171
115	4	Washer, 3/8", Lock, Black	10069BK
116	4	Nut, 3/8"-16, Hex, Black	10059BK
117	2	Washer, .516" I.D. x .750" O.D. x .0250"	25336
118	2	Washer, .516" I.D. x 1" O.D. x .0269"	15328
119	2	Washer, 1-1/4" O.D. x 3/4" I.D. x 16 Gauge	205-0710
120	4	Ring, Snap, 1/2", External, .050" Thick	13273
121	2	Cotter Pin, 1/4" x 2", Black	15886BK
122	13	Fastener, J-Nut, #10-24	25776
123	14	Screw, #10-24 x 1/2", Button Head, Allen	25842
124	4	Bolt, 5/16"-18 x 1/2", Nylock, Hex (3 shown)	10012
125	3	Bolt, 3/8"-16 x 3/8", Nylock, Hex	17633
126	1	Holder, Owner's Manual - Clear	25715
127	5	Rivet, Pop, SD62BS-3/16"-.06"/.13" (3 shown)	11512
128	2	Tape, 1" Wide Single Face Foam x 11"	82015R011
129	4	Tape, 1" Wide Single Face Foam x 8"	82015R008
130	2	Tape, 1" Wide Single Face Foam x 14"	82015R014
131	2	Washer, 5/16" Flat	10063
132	2	Cap, End, 1" I.D. x 1 1/4" O.D., Plastic	20474
133	2	Washer, 5/16", Extenal Tooth	16368
134	6	Washer, .516" I.D. x 1" O.D. x .0269"	15328
135	1	Latch Weldment, Front	27013FW
136	1	Latch Weldment, Rear	27013RW
137	2	Ring, External Snap, Lock, 1/2"	13273
138	4	O-Ring, 5/16" I.D. x 1/16"	26614
139	2	Spring, Dampener, Retract	26963
140	4	Ring, External Snap, 5/16"	24570
141	2	Bolt, 1/4-20 x 1/2", Buton Head Socket	15733
142	2	Roller Assembly	1000-2395A
143	2	Roller Retainer	915-5353
144	2	Washer, Finger Disc Springs	27276
145	1	Grommet, ID-.281", FR-.125", GD-.625", T-.375"	27725
146	1	Grommet, ID-.312", FR-.250", GD-.813", T-.500"	27726
147	3	Clamp, 1/4" ID, Nylon Loop, BLK	84396
148	2	Spacer, UHMW, Vertical Channel	995-0320
149	2	Bearing, Flange, 1" x 1/2", 16FDU08	28031
150	2	Nut, 5/16"-18, Top Lock, Black	28324BK
151	2	Bolt, 5/16-18 x 3/4", Button Hd. Socket Cap, Bk.	24440

42" Floor-To-Ground Automatic Inboard Roll Stop IB Lift Models Exploded View

Note: Illustrations depict components as equipped when specified lift series was in production. Replacement components may reflect newer lift series configurations.

Series 06

- L915IB
- L915FIB
- L918IB
- L918FIB



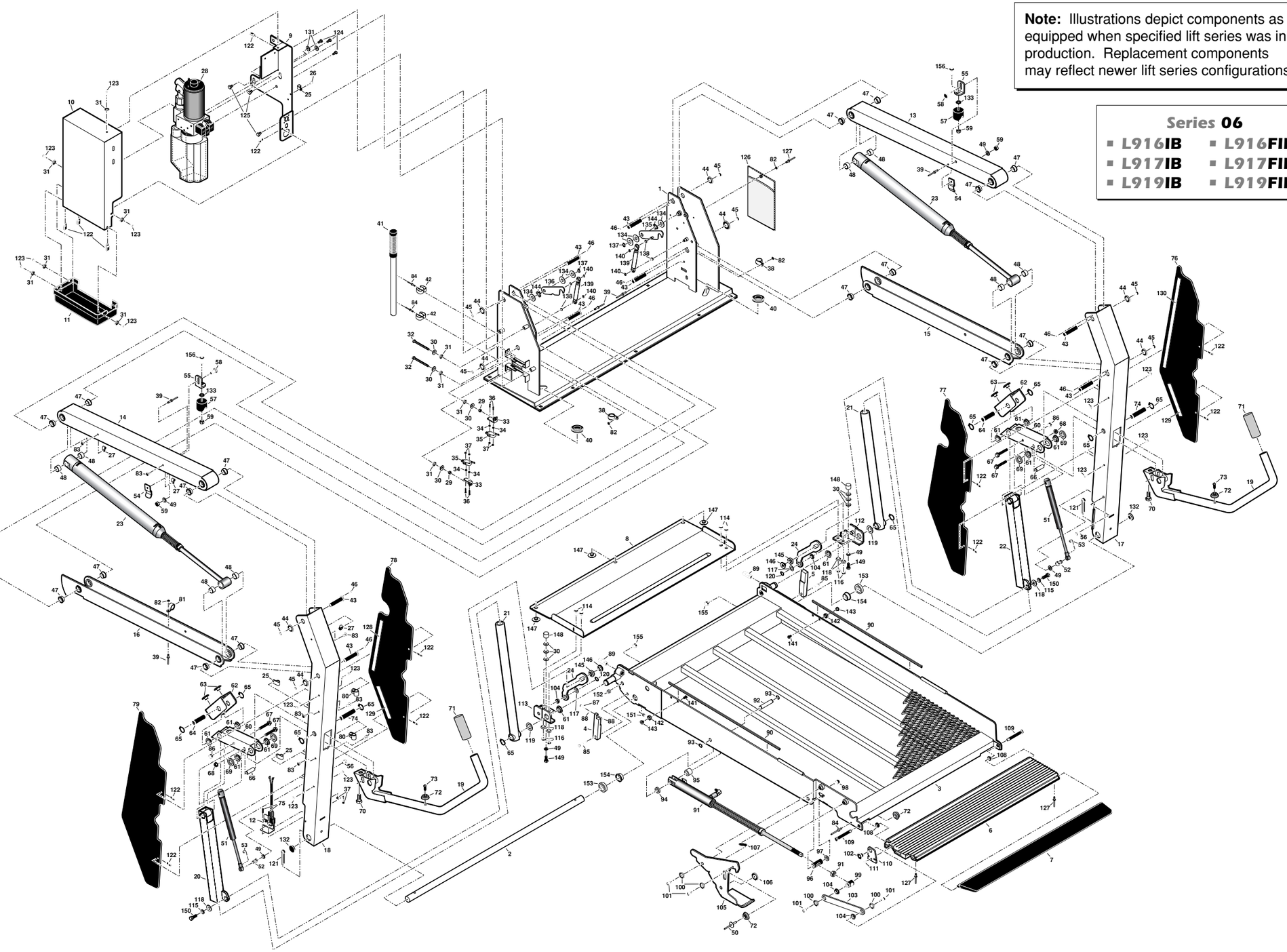
Unfold for:
42" Floor-To-Ground
Automatic Inboard
Roll Stop IB Lift Models
Exploded View

48" Floor-To-Ground Automatic Inboard Roll Stop IB Lift Models Exploded View

Note: Illustrations depict components as equipped when specified lift series was in production. Replacement components may reflect newer lift series configurations.

Series 06

- L916IB
- L916FIB
- L917IB
- L917FIB
- L919IB
- L919FIB



48" Floor-To-Ground Automatic Inboard Roll Stop
IB Lift Models Repair Parts List

Part Numbers of Items Dedicated per Lift Model

Item	Qty.	Description	L916IB	L916FIB	L917IB	L917FIB	L919IB	L919FIB
1	1	Base Plate Weldment	916R5148W30	916F5148W30	917R5148W33	917F5148W33	919R5148W34	919F5148W34
2	1	Pin, Platform Pivot	915U032430	915U032430	911-5324	911-5324	911-5324-31	911-5324-31
3	1	Platform Weldment	915R63050IBW	915R63050IBW	917R63350IBW	917R63350IBW	919R63450IBW	919R63450IBW
4	1	Block, Platform Stop - Bridging - Rear	25777R	915-0311	25777R	915-0311	25777R	915-0311
5	1	Block, Platform Stop - Bridging - Front	915-0311	25777F	915-0311	25777F	915-0311	25777F
6	1	Roll Stop (Extruded Aluminum)	915R4312-30	915R4312-30	915R4312-33	915R4312-33	915R4312-34	915R4312-34
7	1	Roll Stop Nose, Rubber	24603-30	24603-30	24603-33	24603-33	24603-34	24603-34
8	1	Bridge Plate	915U0146IB	915U0146IB	915U0147IB	915U0147IB	915U0147IB-34	915U0147IB-34
9	1	Plate, Backing/Mounting-Pump Module	915R4501	915F5501	915R4501	915F5501	915R4501	915F5501
10	1	Pump Cover, Upper	915R4513W	915F4513W	915R4513W	915F4513W	915R4513W	915F4513W
11	1	Pump Cover, Lower	915R4503	915F4503	915R4503	915F4503	915R4503	915F4503
12	1	Bridge Switch Assembly	25463RA	25463FA	25463RA	25463FA	25463RA	25463FA

Part Numbers of Items Identical on All Lift Models

Item	Qty.	Description	Part No.
13A	1	Parallel Arm Weldment, Top, Front	915-0437F
13B	1	Parallel Arm Assembly, Top, Front (w/Flanged Bearings)	915-0437FA
14A	1	Parallel Arm Weldment, Top, Rear	915-0437R
14B	1	Parallel Arm Assembly, Top, Rear (w/Flanged Bearings)	915-0437RA
15A	1	Parallel Arm Weldment, Bottom, Front	915F4458
15B	1	Parallel Arm Assembly, Bottom, Front (w/Flanged Bearings)	915F4458A
16A	1	Parallel Arm Weldment, Bottom, Rear	915R4458
16B	1	Parallel Arm Assembly, Bottom, Rear (w/Flanged Bearings)	915R4458A
17	1	Vertical Channel Weldment, Front	955F2448IBW
18	1	Vertical Channel Weldment, Rear	955R2448IBW
19	2	Handrail Weldment, ADA	916-0409WIB
20	1	Tube Wmt., Upper Fold Arm, Rear	916-0425RW
21	2	Tube Wmt., Lower Fold Arm	916-0426RW
22	1	Tube Wmt., Upper Fold Arm, Front	916-2425FW
23	2	Cylinder	C1514.3-9408
24	2	Lever, Inboard Barrier, Wmt.	916-5404
25	3	Clip, Cable, 1/2", Plastic	10092
26	1	Rivet, Snap, Black, .201" Hole x .217/.256"	25973
27	3	Clamp, 1/4" ID, Nylon Loop, BLK	84396
28	1	Pump Assembly (M268 with Backup Pump)	25597A12V-04
29	2	Nut, 1/4"-20, Nylock	14614
30	10	Washer, 1/4" Flat	10062
31	10	Washer, 1/4" I.D. x 11/16" x .030" - Nylon	12690
32	2	Bolt, 1/4"-20 x 3"	23976
33	2	Microswitch/Slide Adjuster Weldment	911-7126W
34	4	Bushing, Microswitch	911-7125
35	2	Microswitch, Floor Level, Cupped	23184
36	4	Screw, #4-40 x 7/8"	24009
37	6	Nut, #4-40 with Lock Washer	19537
38	2	Clamp, Insulate, 1-1/8" I.D.	20535
39	5	Rivet, Pop, SD66BS - 3/16"	14993
40	2	Grommet, Rubber, 1.25" I.D.	25916
41	1	Handle, Pump (w/Grip)	17206A
42	2	Clamp, Spring - Pump Handle	12350
43	8	Pin, Pivot Parallel Arm	917-0403
44	8	Washer, 1/2" Flat, Black Zinc	25346
45	8	Screw, 5/16-18 x 3/4", SHFS	25527
46	8	Screw, Drive #8 x 3/16" Long, Black	24439BK
47	16	Bearing, Flange, 3/4" x 3/8", 12FDU06	24011
48	8	Bushing, 3/4" I.D. x 1/2"	900-0456
49	6	Washer, 5/16", Lock	10068
50	1	Rivet, Pop, SD68BSLF-3/16"-38/50	15244
51	2	Gas Spring, Fold Arm	27356
52	2	Ball Stud, Gas Spring, 13mm x 5/16-18 Female	26236
53	2	Clip, Safety	12608
54	2	Bracket, Inner Side Panel Guide	915-0703
55	2	Bracket, Mounting, Quiet Ride	915-0392
56	2	Bolt, 5/16"-18 x 1/2", Button Hd. Socket Cap, Bk.	26281
57	2	Stow Block, Guided	28593
58	2	Bolt, 5/16"-18 x 3/4", Carriage, Black	15858BK
59	4	Nut, 5/16"-18, Hex	10058
60	2	Arm, Slide Support	915-0412
61	10	Bearing, Flange, 3/4" x 1/4"	24012
62	2	Slide, Platform, Rotate, Weldment	915-0406W
63	4	Bearing, UHMW, Flat, 1.226"	205-1760
64	2	Pin, Pivot, Lower Arm	900-0413
65	10	Ring, Snap, 3/4", External	18657
66	2	Spacer, 1/2" O.D. x .334" I.D. x 1.515"	25132
67	4	Bolt, 5/16"-18 x 2", Flange, Hex	25130
68	2	Nut, 5/16"-18, Serrated Flange	25131
69	4	Spacer, Handrail, UHMW	911-5301
70	2	Bolt, 7/16"-20 x 1", Hex	15746
71	2	Grip, Handle, Yellow	19074
72	4	Bumper, Rubber, 31/32" O.D.	10950
73	2	Screw, #8-18 x 1/2", Self-Tap, Phillips	13583
74	2	Pin, Pivot, Handrail	900-0429
75	2	Screw, #4-40 x 5/8", Round Head	14810
76	1	Cover, Plastic, Parallel Arm, Fr - w/Tape	915-3704A
77	1	Cover, Plastic, Parallel Arm, Fr, Inside - w/Tape	915-3701A
78	1	Cover, Plastic, Parallel Arm, Rr, Inside - w/Tape	915-3703A
79	1	Cover, Plastic, Parallel Arm, Rr - w/Tape	915-3702A
80	2	Clip, Cable, 7/16", Plastic	15777
81	1	Clamp, Insulated, 5/8" I.D.	84070
82	4	Washer, #10 Flat	11541
83	7	Rivet, Snap, Black, .256/.295" Thick	26362
84	3	Rivet, Pop, SD64BS - 3/16"	11513
85	2	Bolt, 5/16"-18 x 1 1/4", Low Soc. Hd. Cap Scr., Bk.	26327
86	2	Nut, 5/16"-18, Lock, Hex, Black	11387BK
87	1	Screw, #8-32 x 1", Mach. Truss Head, Black	19912BK
88	2	Nut, #8-32, Hex	10777
89	2	Screw, 1/2"-20 x 1 1/2", Set, Lock	18663
90	2	Edge Liner, 1/8" U-Molding, Yellow	24045R025.75
91	1	Cylinder, Roll Stop, Assembly	915-5318A
92	1	Pin, Platform Cylinder	915-0414
93	2	Ring, Snap, 1/2", External, .035" Thick	20946
94	1	Spacer, Flap Cylinder, .184" Thick	915-0416
95	1	Spacer, Flap Cylinder, .700" Thick	915-0415
96	1	Pivot, Roll Stop Cylinder, Front	990-0352
97	1	Washer, .4" I.D. x .810" O.D. x .12"	24536
98	1	Bolt, 3/8"-16 x 3/4", Soc. Hd. Cap Screw, Bk.	26259
99	1	Adapter, Cylinder/Roll Stop Lever	915-0344
100	4	Adapter, Cylinder/Roll Stop Lever-Out	990-0341
101	4	Screw, #10-32 x 3/8", Flat Head, Hex	24537
102	1	Pivot, Roll Stop Lever	24550
103	1	Lever, Roll Stop Latch (Assembly #915-0345A)	915-0345
104	4	Bearing, Flange, 1/2" x 1/4"	24442
105	1	Latch, Roll Stop	915-0343R
106	1	Spacer, UHMW, Latch	950-7760
107	1	Spring, 1/4" x 1" Extension w/Hooks	10774
108	2	Bearing, Flange, 3/8" x 1/4"	24028
109	2	Pin, Clevis, 3/8" x 3", Black	24932BK
110	1	Tab, Roll Stop, Flap Cylinder	915-2367
111	1	Screw, 10-32 x 5/8", Pan Head Phillips, Thd. Cut	26714
112	1	Bridge Plate Bracket, Weldment, Front	916-5431FW
113	1	Bridge Plate Bracket, Weldment, Rear	916-5431RW
114	4	Bolt, 3/8"-16 x 3/4", Flanged, Button Head	25171
115	2	Washer, 3/8", Lock, Black	10069BK
116	4	Nut, 3/8"-16, Hex, Lock, Black	13617
117	2	Washer, .516" I.D. x .750" O.D. x .0250"	25336
118	6	Washer, 3/8", Flat, Auto/BK	10064
119	2	Washer, .060" x .76" x 1.25" O.D., Auto/BK	27734
120	2	Ring, Snap, 1/2", External, .050" Thick	13273
121	2	Cotter Pin, 1/4" x 2", Black	15886BK
122	13	Fastener, J-Nut, #10-24	25776
123	14	Screw, #10-24 x 1/2", Button Head, Allen	25842
124	4	Bolt, 5/16"-18 x 1/2", Nylock, Hex (3 shown)	10012
125	3	Bolt, 3/8"-16 x 3/8", Nylock, Hex	17633
126	1	Holder, Owner's Manual - Clear	25715
127	5	Rivet, Pop, SD62BS-3/16"-.06"/.13" (3 shown)	11512
128	2	Tape, 1" Wide Single Face Foam x 11"	82015R011
129	4	Tape, 1" Wide Single Face Foam x 8"	82015R008
130	2	Tape, 1" Wide Single Face Foam x 14"	82015R014
131	2	Washer, 5/16" Flat	10063
132	2	Cap, End, 1" I.D. x 1 1/4" O.D., Plastic	20474
133	2	Washer, 5/16", Extenal Tooth	16368
134	6	Washer, .516" I.D. x 1" O.D. x .0269"	15328
135	1	Latch Weldment, Front	27013FW
136	1	Latch Weldment, Rear	27013RW
137	2	Ring, External Snap, Lock, 1/2"	13273
138	4	O-Ring, 5/16" I.D. x 1/16"	26614
139	2	Spring, Dampener, Retract	26963
140	4	Ring, External Snap, 5/16"	24570
141	2	Bolt, 1/4-20 x 1/2", Buton Head Socket	15733
142	2	Roller Assembly	1000-2395A
143	2	Roller Retainer	915-5353
144	2	Washer, Finger Disc Springs	27276
145	2	Pivot, Bridgeplate Lever, Upper, Inside	916-5433
146	2	Pivot, Bridgeplate Lever, Upper, Outer	916-5434
147	3	Bearing, UHMW Flat, Thin, BK	916-5406
148	2	Bumper, .75" x .625", 5/16"-18THD	915-0391
149	2	Bolt, 5/16"-18 x 3/4" Hex	13890
150	2	Bolt, 3/8"-16 x 1" Hex, Auto/BK	10025
151	1	Grommet, ID-.281", FR-.125", GD-.625", T-.375"	27725
152	1	Grommet, ID-.312", FR-.250", GD-.813", T-.500"	27726
153	2	Spacer, UHMW, Vertical Channel	995-0320
154	2	Bearing, Flange, 1" x 1/2", 16FDU08	28031
155	2	Nut, 5/16"-18, Top Lock, Black	28324BK
156	2	Bolt, 5/16-18 x 3/4", Button Hd. Socket Cap, Bk.	24440

42" Floor-To-Ground Fixed Inboard Roll Stop
Non-IB Lift Models Repair Parts List

Part Numbers of Items Dedicated per Lift Model

Item	Qty.	Description	L915	L915F	L918	L918F
1	1	Base Plate Weldment	915R5142W30	915F5142W30	918R5142W33	918F5142W33
2	1	Bridge Switch Assembly	25463RA	25463FA	25463RA	25463FA
3	1	Pin, Platform Pivot	915U032430	915U032430	911-5324	911-5324
4	1	Platform Weldment	915R63050W	915R63050W	915R63350W	915R63350W
5	1	Block, Platform Stop - Bridging - Rear	25778	900-0311	25778	900-0311
6	1	Block, Platform Stop - Bridging - Front	900-0311	25778	900-0311	25778
7	1	Roll Stop (Extruded Aluminum)	915R4312-30	915R4312-30	915R4312-33	915R4312-33
8	1	Roll Stop Nose, Rubber	24603-30	24603-30	24603-33	24603-33
9	1	Bridge Plate	915U0145	915U0145	915U0148	915U0148
10	1	Plate, Backing/Mounting-Pump Module	915R4501	915F5501	915R4501	915F5501
11	1	Pump Cover, Upper	915R4513W	915F4513W	915R4513W	915F4513W
12	1	Pump Cover, Lower	915R4503	915F4503	915R4503	915F4503
13	Per Model	Clip, Cable, 1/2", Plastic	10092 (Qty. 3)	10092 (Qty. 2)	10092 (Qty. 3)	10092 (Qty. 2)
14	Per Model	Rivet, Snap, Black, .201" Hole x .217/.256"	25973 (Qty. 1)	None	25973 (Qty. 1)	None

Part Numbers of Items Identical on All Lift Models

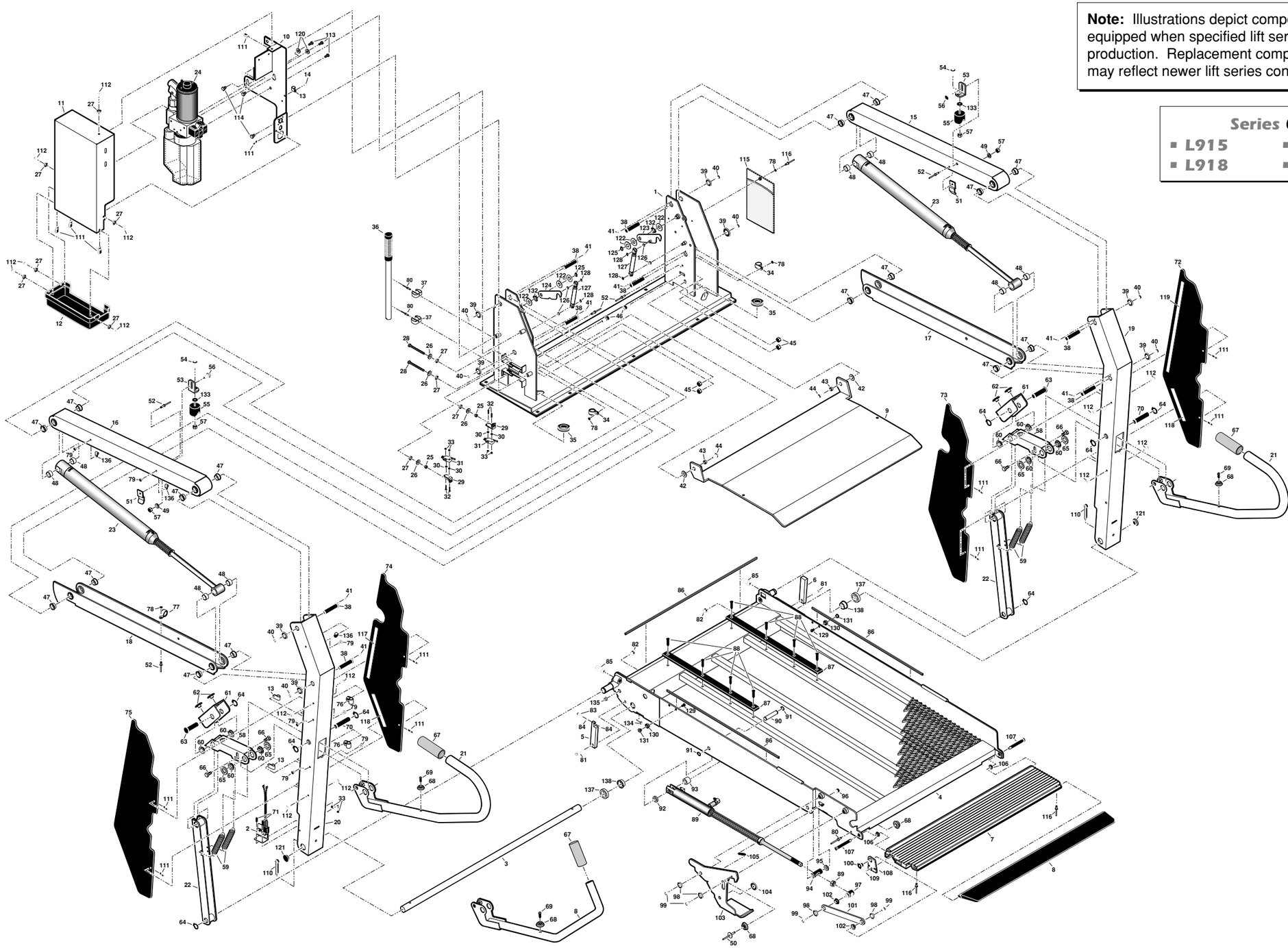
Item	Qty.	Description	Part No.
15A	1	Parallel Arm Weldment, Top, Front	915-0422F
15B	1	Parallel Arm Assembly, Top, Front (w/Flanged Bearings)	915-0422FA
16A	1	Parallel Arm Weldment, Top, Rear	915-0422R
16B	1	Parallel Arm Assembly, Top, Rear (w/Flanged Bearings)	915-0422RA
17A	1	Parallel Arm Weldment, Bottom, Front	915F4457
17B	1	Parallel Arm Assembly, Bottom, Front (w/Flanged Bearings)	915F4457A
18A	1	Parallel Arm Weldment, Bottom, Rear	915R4457
18B	1	Parallel Arm Assembly, Bottom, Rear (w/Flanged Bearings)	915R4457A
19	1	Vertical Channel Weldment, Front	955F2442W
20	1	Vertical Channel Weldment, Rear	955R2442W
21	2	Handrail Weldment, ADA	915-0409W
22	2	Platform Pivot Arm Weldment	915-0424W
23	2	Cylinder	C1514.3-9407
24	1	Pump Assembly (M268 with Backup Pump)	25597A12V-04
25	2	Nut, 1/4"-20, Nylock	14614
26	4	Washer, 1/4" Flat	10062
27	10	Washer, 1/4" I.D. x 11/16" x .030" - Nylon	12690
28	2	Bolt, 1/4"-20 x 3"	23976
29	2	Microswitch/Slide Adjuster Weldment	911-7126W
30	4	Bushing, Microswitch	911-7125
31	2	Microswitch, Floor Level, Cupped	23184
32	4	Screw, #4-40 x 7/8"	24009
33	6	Nut, #4-40 with Lock Washer	19537
34	2	Clamp, Insulate, 1-1/8" I.D.	20535
35	2	Grommet, Rubber, 1.25" I.D.	25916
36	1	Handle, Pump (w/Grip)	17206A
37	2	Clamp, Spring - Pump Handle	12350
38	8	Pin, Pivot Parallel Arm	917-0403
39	8	Washer, 1/2" Flat, Black Zinc	25346
40	8	Screw, 5/16-18 x 3/4", SHFS	25527
41	8	Screw, Drive #8 x 3/16" Long	24439BK
42	2	Washer, 14 Ga. Whale Pin	205-1791
43	2	Bearing, 1/2" O.D. x 3/8" I.D. x .150" Long	955-0102
44	2	Bolt, 3/8-16 x 3/4", Flanged, Button Head	25171
45	4	Nut, 3/8-16 Top Lock, Black	28339BK
46	2	Bolt, 3/8-16 x 3/4", Socket Head, Cap, Black	26259
47	16	Bearing, Flange, 3/4" x 3/8", 12FDU06	24011
48	8	Bushing, 3/4" I.D. x 1/2"	900-0456
49	2	Washer, 5/16", Lock	10068
50	1	Rivet, Pop, SD68BSLF-3/16"-38/50	15244
51	2	Bracket, Inner Side Panel Guide	915-0703
52	5	Rivet, Pop, SD66BS - 3/16"	14993
53	2	Bracket, Mounting, Quiet Ride	915-0392
54	2	Bolt, 5/16"-18 x 3/4", Button Hd. Socket Cap, Bk.	24440
55	2	Stow Block, Guided	28593
56	2	Bolt, 5/16"-18 x 3/4", Carriage, Black	15858BK
57	4	Nut, 5/16"-18, Hex	10058
58	2	Arm, Slide Support	915-0411
59	4	Spring, 3/4" x 5/12" Extension with Hooks	24281
60	8	Bearing, Flange, 3/4" x 1/4"	24012
61	2	Slide, Platform, Rotate	915-0407
62	4	Bearing, UHMW, Flat, 1.226"	205-1760
63	2	Pin, Pivot, Lower Arm	915-0413
64	8	Ring, Snap, 3/4", External	18657
65	4	Spacer, Handrail, UHMW	911-5301
66	4	Bolt, 3/8"-16 x 3/4", Hex	12463
67	2	Grip, Handle, Yellow	19074
68	4	Bumper, Rubber, 31/32" O.D.	10950
69	2	Screw, #8-18 x 1/2", Self-Tap, Phillips	13583
70	2	Pin, Pivot, Handrail	900-0429
71	2	Screw, #4-40 x 5/8", Round Head	14810
72	1	Cover, Plastic, Parallel Arm, Fr - w/Tape	915-3704A
73	1	Cover, Plastic, Parallel Arm, Fr, Inside - w/Tape	915-3701A
74	1	Cover, Plastic, Parallel Arm, Rr, Inside - w/Tape	915-3703A
75	1	Cover, Plastic, Parallel Arm, Rr - w/Tape	915-3702A
76	2	Clip, Cable, 7/16", Plastic	15777
77	1	Clamp, Insulated, 5/8" I.D.	84070
78	4	Washer, #10 Flat	11541
79	7	Rivet, Snap, Black, .256/.295" Thick	26362
80	3	Rivet, Pop, SD64BS - 3/16"	11513
81	2	Bolt, 5/16"-18 x 1 1/4", Low Soc. Hd. Cap Scr., Bk.	26327
82	2	Nut, 5/16"-18, Top Lock, Black	28324BK
83	1	Screw, #8-32 x 1", Mach. Truss Head, Black	19912BK
84	2	Nut, #8-32, Hex	10777
85	2	Screw, 1/2"-20 x 1 1/2", Set, Lock	18663
86	3	Edge Liner, 1/8" U-Molding, Yellow	24045R025.75
87	2	Slide, Platform, UHMW	900-0320
88	8	Screw, #8-18 x 1" Wafer Head, Self Tap	14549
89	1	Cylinder, Roll Stop, Assembly	915-5318A
90	1	Pin, Platform Cylinder	915-0414
91	2	Ring, Snap, 1/2", External, .035" Thick	20946
92	1	Spacer, Flap Cylinder, .184" Thick	915-0416
93	1	Spacer, Flap Cylinder, .700" Thick	915-0415
94	1	Pivot, Roll Stop Cylinder, Front	990-0352
95	1	Washer, .4" I.D. x .810" O.D. x .12"	24536
96	1	Bolt, 3/8"-16 x 3/4", Soc. Hd. Cap Screw, Bk.	26259
97	1	Adapter, Cylinder/Roll Stop Lever	915-0344
98	4	Adapter, Cylinder/Roll Stop Lever-Out	990-0341
99	4	Screw, #10-32 x 3/8", Flat Head, Hex	24537
100	1	Pivot, Roll Stop Lever	24550
101	1	Lever, Roll Stop Latch (Assembly #915-0345A)	915-0345
102	2	Bearing, Flange, 1/2" x 1/4"	24442
103	1	Latch, Roll Stop	915-0343R
104	1	Spacer, UHMW, Latch	950-7760
105	1	Spring, 1/4" x 1" Extension w/Hooks	10774
106	2	Bearing, Flange, 3/8" x 1/4"	24028
107	2	Pin, Clevis, 3/8" x 3", Black	24932BK
108	1	Tab, Roll Stop, Flap Cylinder	915-2367
109	1	Screw, 10-32 x 5/8", Pan Head Phillips, Thd. Cut	26714
110	2	Cotter Pin, 1/4" x 2", Black	15886BK
111	13	Fastener, J-Nut, #10-24	25776
112	14	Screw, #10-24 x 1/2", Button Head, Allen	25842
113	4	Bolt, 5/16"-18 x 1/2", Nylock, Hex (3 shown)	10012
114	3	Bolt, 3/8"-16 x 3/8", Nylock, Hex	17633
115	1	Holder, Owner's Manual - Clear	25715
116	5	Rivet, Pop, SD62BS-3/16"-.06"/.13" (3 shown)	11512
117	2	Tape, 1" Wide Single Face Foam x 11"	82015R011
118	4	Tape, 1" Wide Single Face Foam x 8"	82015R008
119	2	Tape, 1" Wide Single Face Foam x 14"	82015R014
120	2	Washer, 5/16" Flat	10063
121	2	Cap, End, 1" I.D. x 1 1/4" O.D., Plastic	20474
122	6	Washer, .516" I.D. x 1" O.D. x .0269"	15328
123	1	Latch Weldment, Front	27013FW
124	1	Latch Weldment, Rear	27013RW
125	2	Ring, External Snap, Lock, 1/2"	13273
126	4	O-Ring, 5/16" I.D. x 1/16"	26614
127	2	Spring, Dampener, Retract	26963
128	4	Ring, External Snap, 5/16"	24570
129	2	Bolt, 1/4-20 x 1/2", Buton Head Socket	15733
130	2	Roller Assembly	1000-2395A
131	2	Roller Retainer	915-5353
132	2	Washer, Finger Disc Springs	27276
133	2	Washer, 5/16" External Tooth	16368
134	1	Grommet, ID-.281", FR-.125", GD-.625", T-.375"	27725
135	1	Grommet, ID-.312", FR-.250", GD-.813", T-.500"	27726
136	3	Clamp, 1/4" ID, Nylon Loop, BLK	84396
137	2	Spacer, UHMW, Vertical Channel	995-0320
138	2	Bearing, Flange, 1" x 1/2", 16FDU08	28031

42" Floor-To-Ground Fixed Inboard Roll Stop Non-IB Lift Models Exploded View

Note: Illustrations depict components as equipped when specified lift series was in production. Replacement components may reflect newer lift series configurations.

Series 06

- L915
- L915F
- L918
- L918F



L916 / L917 Only

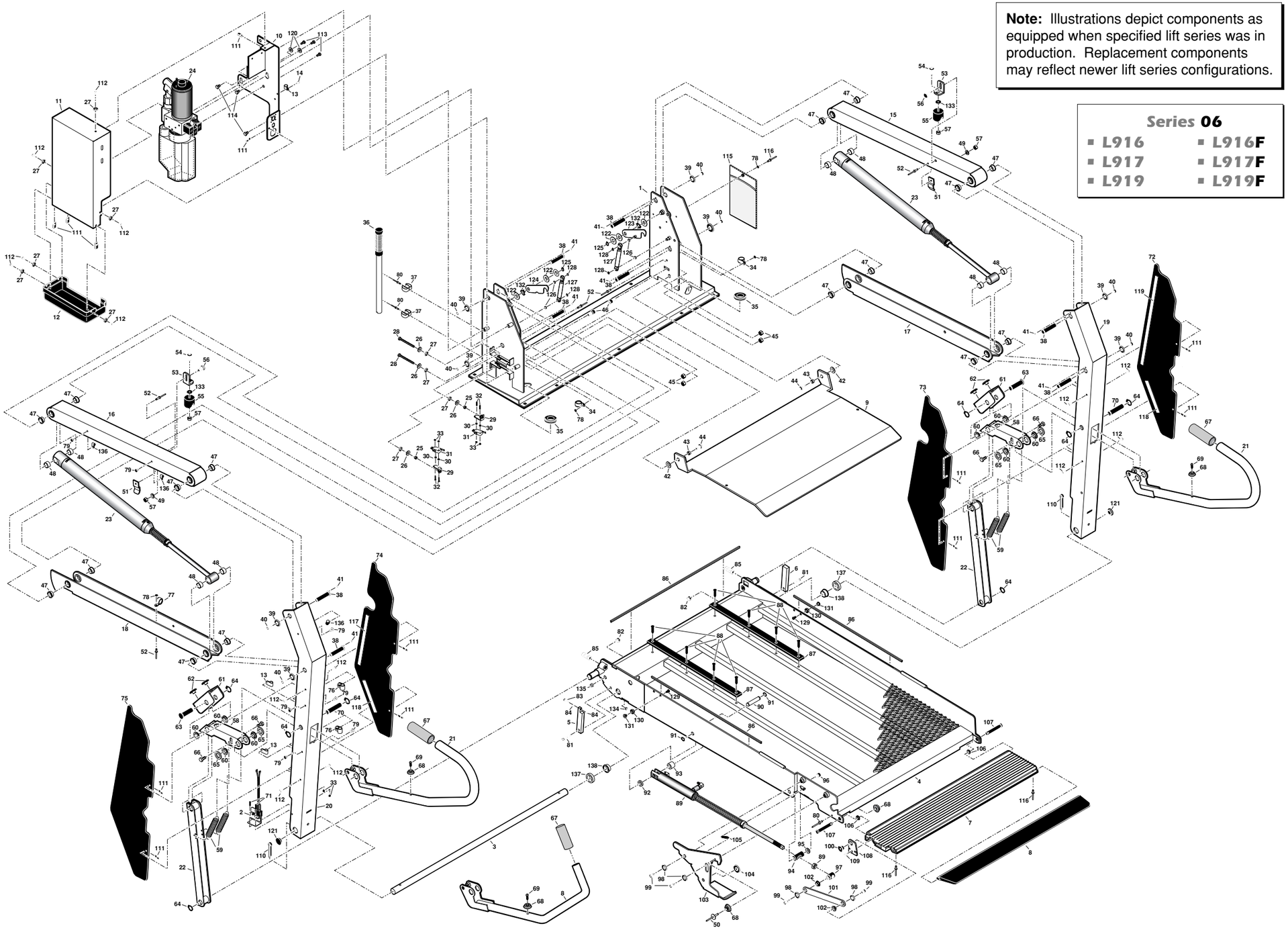
Unfold for:
42" Floor-To-Ground
Fixed Inboard Roll Stop
Non-IB Lift Models
Exploded View

48" Floor-To-Ground Fixed Inboard Roll Stop Non-IB Lift Models Exploded View

Note: Illustrations depict components as equipped when specified lift series was in production. Replacement components may reflect newer lift series configurations.

Series 06

- L916
- L916F
- L917
- L917F
- L919
- L919F



L916 / L917 Only

48" Floor-To-Ground Fixed Inboard Roll Stop
Non-IB Lift Models Repair Parts List

Part Numbers of Items Dedicated per Lift Model

Item	Qty.	Description	L916	L916F	L917	L917F	L919	L919F
1	1	Base Plate Weldment	916R5148W30	916F5148W30	917R5148W33	917F5148W33	919R5148W34	919F5148W34
2	1	Bridge Switch Assembly	25463RA	25463FA	25463RA	25463FA	25463RA	25463FA
3	1	Pin, Platform Pivot	915U032430	915U032430	911-5324	911-5324	911-5324-31	911-5324-31
4	1	Platform Weldment	915R63050W	915R63050W	915R63350W	915R63350W	919R63450W	919R63450W
5	1	Block, Platform Stop - Bridging - Rear	25778	900-0311	25778	900-0311	25778	900-0311
6	1	Block, Platform Stop - Bridging - Front	900-0311	25778	900-0311	25778	900-0311	25778
7	1	Roll Stop (Extruded Aluminum)	915R4312-30	915R4312-30	915R4312-33	915R4312-33	915R4312-34	915R4312-34
8	1	Roll Stop Nose, Rubber	24603-30	24603-30	24603-33	24603-33	24603-34	24603-34
9	1	Bridge Plate	915U0146	915U0146	915U0147	915U0147	915U0147-34	915U0147-34
10	1	Plate, Backing/Mounting-Pump Module	915R4501	915F5501	915R4501	915F5501	915R4501	915F5501
11	1	Pump Cover, Upper	915R4513W	915F4513W	915R4513W	915F4513W	915R4513W	915F4513W
12	1	Pump Cover, Lower	915R4503	915F4503	915R4503	915F4503	915R4503	915F4503
13	Per Model	Clip, Cable, 1/2", Plastic	10092 (Qty. 3)	10092 (Qty. 2)	10092 (Qty. 3)	10092 (Qty. 2)	10092 (Qty. 3)	10092 (Qty. 2)
14	Per Model	Rivet, Snap, Black, .201" Hole x .217/.256"	25973 (Qty. 1)	None	25973 (Qty. 1)	None	25973 (Qty. 1)	None

Part Numbers of Items Identical on All Lift Models

Item	Qty.	Description	Part No.
15A	1	Parallel Arm Weldment, Top, Front	915-0437F
15B	1	Parallel Arm Assembly, Top, Front (w/Flanged Bearings)	915-0437FA
16A	1	Parallel Arm Weldment, Top, Rear	915-0437R
16B	1	Parallel Arm Assembly, Top, Rear (w/Flanged Bearings)	915-0437RA
17A	1	Parallel Arm Weldment, Bottom, Front	915F4458
17B	1	Parallel Arm Assembly, Bottom, Front (w/Flanged Bearings)	915F4458 A
18A	1	Parallel Arm Weldment, Bottom, Rear	915R4458
18B	1	Parallel Arm Assembly, Bottom, Rear (w/Flanged Bearings)	915R4458A
19	1	Vertical Channel Weldment, Front	955F2448W
20	1	Vertical Channel Weldment, Rear	955R2448W
21	2	Handrail Weldment, ADA	916-0409W
22	2	Platform Pivot Arm Weldment	915-0441W
23	2	Cylinder	C1514.3-9408
24	1	Pump Assembly (M268 with Backup Pump)	25597A12V-04
25	2	Nut, 1/4"-20, Nylock	14614
26	4	Washer, 1/4" Flat	10062
27	10	Washer, 1/4" I.D. x 11/16" x .030" - Nylon	12690
28	2	Bolt, 1/4"-20 x 3"	23976
29	2	Microswitch/Slide Adjuster Weldment	911-7126W
30	4	Bushing, Microswitch	911-7125
31	2	Microswitch, Floor Level, Cupped	23184
32	4	Screw, #4-40 x 7/8"	24009
33	6	Nut, #4-40 with Lock Washer	19537
34	2	Clamp, Insulate, 1-1/8" I.D.	20535
35	2	Grommet, Rubber, 1.25" I.D.	25916
36	1	Handle, Pump (w/Grip)	17206A
37	2	Clamp, Spring - Pump Handle	12350
38	8	Pin, Pivot Parallel Arm	917-0403
39	8	Washer, 1/2" Flat, Black Zinc	25346
40	8	Screw, 5/16-18 x 3/4", SHFS	25527
41	8	Screw, Drive #8 x 3/16" Long	24439BK
42	2	Washer, 14 Ga. Whale Pin	205-1791
43	2	Bearing, 1/2" O.D. x 3/8" I.D. x .150" Long	955-0102
44	2	Bolt, 3/8-16 x 3/4", Flanged, Button Head	25171
45	4	Nut, 3/8-16 Top Lock, Black	28339BK
46	2	Bolt, 3/8-16 x 3/4", Socket Head, Cap, Black	26259
47	16	Bearing, Flange, 3/4" x 3/8", 12FDU06	24011
48	8	Bushing, 3/4" I.D. x 1/2"	900-0456
49	2	Washer, 5/16", Lock	10068
50	1	Rivet, Pop, SD68BSLF-3/16"-38/50	15244
51	2	Bracket, Inner Side Panel Guide	915-0703
52	5	Rivet, Pop, SD66BS - 3/16"	14993
53	2	Bracket, Mounting, Quiet Ride	915-0392
54	2	Bolt, 5/16"-18 x 3/4", Button Hd. Socket Cap, Bk.	24440
55	2	Stow Block, Guided	28593
56	2	Bolt, 5/16"-18 x 3/4", Carriage, Black	15858BK
57	4	Nut, 5/16"-18, Hex	10058
58	2	Arm, Slide Support	915-0411
59	4	Spring, 3/4" x 5/12" Extension with Hooks	24281
60	8	Bearing, Flange, 3/4" x 1/4"	24012
61	2	Slide, Platform, Rotate	915-0407
62	4	Bearing, UHMW, Flat, 1.226"	205-1760
63	2	Pin, Pivot, Lower Arm	915-0413
64	8	Ring, Snap, 3/4", External	18657
65	4	Spacer, Handrail, UHMW	911-5301
66	4	Bolt, 3/8"-16 x 3/4", Hex	12463
67	2	Grip, Handle, Yellow	19074
68	4	Bumper, Rubber, 31/32" O.D.	10950
69	2	Screw, #8-18 x 1/2", Self-Tap, Phillips	13583
70	2	Pin, Pivot, Handrail	900-0429
71	2	Screw, #4-40 x 5/8", Round Head	14810
72	1	Cover, Plastic, Parallel Arm, Fr - w/Tape	915-3704A
73	1	Cover, Plastic, Parallel Arm, Fr, Inside - w/Tape	915-3701A
74	1	Cover, Plastic, Parallel Arm, Rr, Inside - w/Tape	915-3703A
75	1	Cover, Plastic, Parallel Arm, Rr - w/Tape	915-3702A
76	2	Clip, Cable, 7/16", Plastic	15777
77	1	Clamp, Insulated, 5/8" I.D.	84070
78	4	Washer, #10 Flat	11541
79	7	Rivet, Snap, Black, .256/.295" Thick	26362
80	3	Rivet, Pop, SD64BS - 3/16"	11513
81	2	Bolt, 5/16"-18 x 1 1/4", Low Soc. Hd. Cap Scr., Bk.	26327
82	2	Nut, 5/16"-18, Top Lock, Black	28324BK
83	1	Screw, #8-32 x 1", Mach. Truss Head, Black	19912BK
84	2	Nut, #8-32, Hex	10777
85	2	Screw, 1/2"-20 x 1 1/2", Set, Lock	18663
86	3	Edge Liner, 1/8" U-Molding, Yellow	24045R025.75
87	2	Slide, Platform, UHMW	900-0320
88	8	Screw, #8-18 x 1" Wafer Head, Self Tap	14549
89	1	Cylinder, Roll Stop, Assembly	915-5318A
90	1	Pin, Platform Cylinder	915-0414
91	2	Ring, Snap, 1/2", External, .035" Thick	20946
92	1	Spacer, Flap Cylinder, .184" Thick	915-0416
93	1	Spacer, Flap Cylinder, .700" Thick	915-0415
94	1	Pivot, Roll Stop Cylinder, Front	990-0352
95	1	Washer, .4" I.D. x .810" O.D. x .12"	24536
96	1	Bolt, 3/8"-16 x 3/4", Soc. Hd. Cap Screw, Bk.	26259
97	1	Adapter, Cylinder/Roll Stop Lever	915-0344
98	4	Adapter, Cylinder/Roll Stop Lever-Out	990-0341
99	4	Screw, #10-32 x 3/8", Flat Head, Hex	24537
100	1	Pivot, Roll Stop Lever	24550
101	1	Lever, Roll Stop Latch (Assembly #915-0345A)	915-0345
102	2	Bearing, Flange, 1/2" x 1/4"	24442
103	1	Latch, Roll Stop	915-0343R
104	1	Spacer, UHMW, Latch	950-7760
105	1	Spring, 1/4" x 1" Extension w/Hooks	10774
106	2	Bearing, Flange, 3/8" x 1/4"	24028
107	2	Pin, Clevis, 3/8" x 3", Black	24932BK
108	1	Tab, Roll Stop, Flap Cylinder	915-2367
109	1	Screw, 10-32 x 5/8", Pan Head Phillips, Thd. Cut	26714
110	2	Cotter Pin, 1/4" x 2", Black	15886BK
111	13	Fastener, J-Nut, #10-24	25776
112	14	Screw, #10-24 x 1/2", Button Head, Allen	25842
113	4	Bolt, 5/16"-18 x 1/2", Nylock, Hex (3 shown)	10012
114	3	Bolt, 3/8"-16 x 3/8", Nylock, Hex	17633
115	1	Holder, Owner's Manual - Clear	25715
116	5	Rivet, Pop, SD62BS-3/16"-.06"/.13" (3 shown)	11512
117	2	Tape, 1" Wide Single Face Foam x 11"	82015R011
118	4	Tape, 1" Wide Single Face Foam x 8"	82015R008
119	2	Tape, 1" Wide Single Face Foam x 14"	82015R014
120	2	Washer, 5/16" Flat	10063
121	2	Cap, End, 1" I.D. x 1 1/4" O.D., Plastic	20474
122	6	Washer, .516" I.D. x 1" O.D. x .0269"	15328
123	1	Latch Weldment, Front	27013FW
124	1	Latch Weldment, Rear	27013RW
125	2	Ring, External Snap, Lock, 1/2"	13273
126	4	O-Ring, 5/16" I.D. x 1/16"	26614
127	2	Spring, Dampener, Retract	26963
128	4	Ring, External Snap, 5/16"	24570
129	2	Bolt, 1/4-20 x 1/2", Buton Head Socket	15733
130	2	Roller Assembly	1000-2395A
131	2	Roller Retainer	915-5353
132	2	Washer, Finger Disc Springs	27276
133	2	Washer, 5/16" External Tooth	16368
134	1	Grommet, ID-.281", FR-.125", GD-.625", T-.375"	27725
135	1	Grommet, ID-.312", FR-.250", GD-.813", T-.500"	27726
136	3	Clamp, 1/4" ID, Nylon Loop, BLK	84396
137	2	Spacer, UHMW, Vertical Channel	995-0320
138	2	Bearing, Flange, 1" x 1/2", 16FDU08	28031

Decals and Antiskid

Decals

The lift is only as safe as the operator. Lift-posted decals are shown by mounting location. Part numbers are provided for all decals. Inspect your lift for any missing, worn or illegible decals. Call 1-800-THE LIFT for replacements.

⚠WARNING

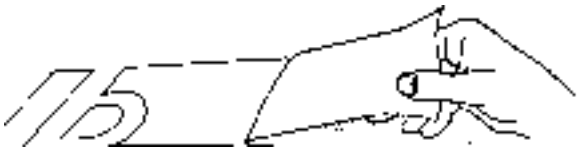
Replace missing, worn or illegible decals. Failure to do so may result in serious bodily injury and/or property damage.

Decal and Antiskid Application Procedure

Clean powder-coated surfaces (or painted surfaces) with isopropyl alcohol **before** decal or antiskid application. Use a clean cloth or paper towels. **DO NOT** use oily shop rags. Wipe surface free of residue with dry portion of cleaning cloth.

Mask Removal: Pay close attention to this mask removal procedure when posting die-cut logo decals.

To remove the masking, start an edge and peel back **slowly**, at a sharp angle directly over the top of the decal.

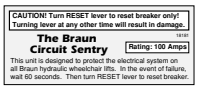


Non Lift-Posted Decals

Parking Courtesy Requested Decal #12375

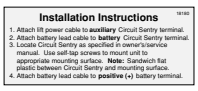
Actual Size: 3" W. x 4-3/4" T.

Two Courtesy Requested decals are supplied with all Braun lifts to be posted on vehicle as desired.


CAUTION! Turn RESET lever to reset breaker only! Turning lever at any other time will result in damage.
The Braun Circuit Sentry
Rating: 100 Amps

Circuit Sentry (100 A.) Label Decal #18181

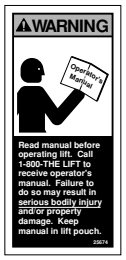
Actual Size: 2-3/16" W. x 15/16" T.


Installation Instructions
1. Attach lift power cable to auxiliary Circuit Sentry terminal.
2. Attach battery lead cable to battery Circuit Sentry terminal.
3. Locate Circuit Sentry as specified in owner's/service manual. Use self-tap screws to mount unit to appropriate mounting surface. Note: Sandwich flat plastic between Circuit Sentry and mounting surface.
4. Attach battery lead cable to positive (+) battery terminal.

Installation Instructions Decal #18180

Posted on 100 ampere 12 volt Circuit Sentry #18189A.

Note: Decals #18182 and #18180 posted on 24 volt Circuit Centry #18190A.


⚠WARNING
Read manual before operating lift. Call 1-800-THE LIFT to receive operator's manual. Failure to do so may result in serious bodily injury and/or property damage. Keep manual in lift pouch.

Operators Manual Policy Warning Decal 25674

Actual Size: 1-1/2" W. x 3-1/4" T.

⚠WARNING
Read manual before operating lift. Call 1-800-THE LIFT to receive operator's manual. Failure to do so may result in serious bodily injury and/or property damage. Keep manual in lift pouch.

Posted on the lift control box as shown.

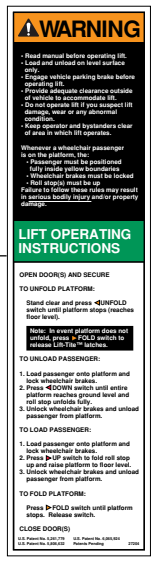
Warnings and Lift Operating Instructions Decal 27204

ADA Standee and Interlock Decal 19342

Supplied to be posted near the lift control box mounting location (lift posted also - see following page).

Decals and Antiskid

Lift-Posted Decals



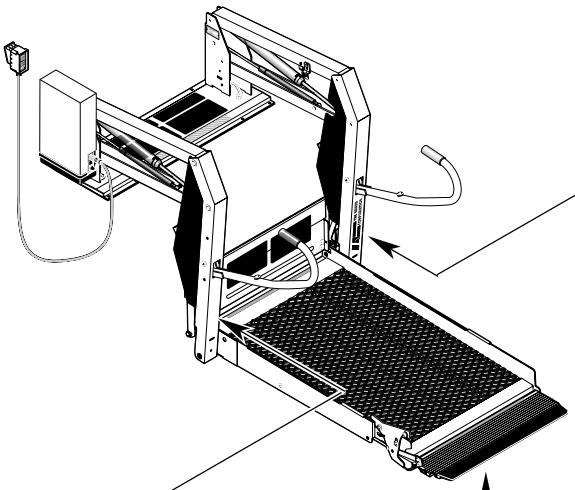
Warnings and Lift Operating Instructions Decal 27204

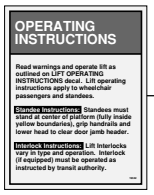
Note: Additional instruction decals supplied in the installation package.

Die-Cut Braun Logo Decal #17866

Actual Size:
1-13/16" W.
x
13-3/4" T.

Note: Pay close attention to the application procedure (mask removal) outlined on page 70 when posting this die-cut decal.



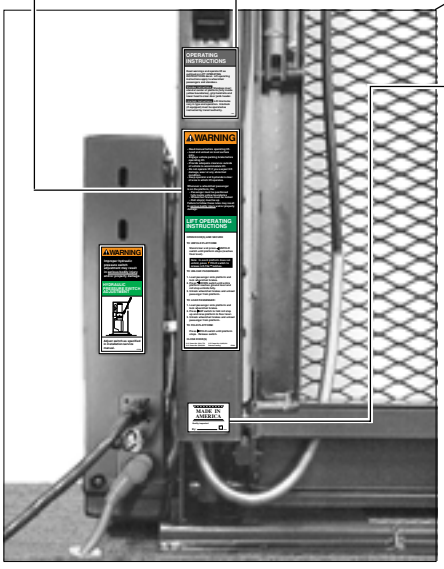


ADA Standee and Interlock Decal #19342

Actual Size:
2-1/2" W. x 3-1/8" T.

Braun 2000 "Providing Access to The World™" Logo Decal #25652

Actual Size:
1-13/16" W. x 2-1/16" T.



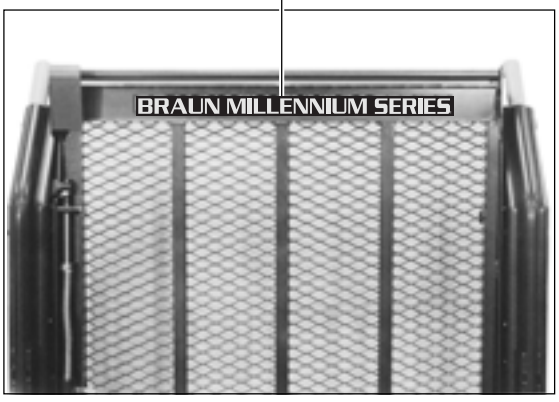
Made-In-America and Inspected By Decal #18229

Actual Size:
1-11/16" W. x 1-3/16" T.

Note: Made In America (**only**) Decal #15641 is available.

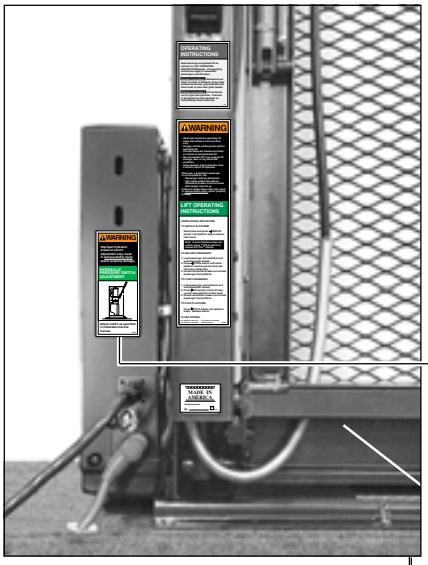
Braun Millennium Series™ Decal #25580

Actual Size: 24" W. x 1-1/2" T.

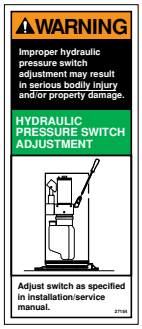


Decals and Antiskid

Lift-Posted Decals



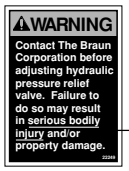
Instruction and Warning,
Pressure Switch
Decal #27154


WARNING
Improper hydraulic pressure switch adjustment may result in serious bodily injury and/or property damage.
HYDRAULIC PRESSURE SWITCH ADJUSTMENT
Adjust switch as specified in installation/service manual.
27154

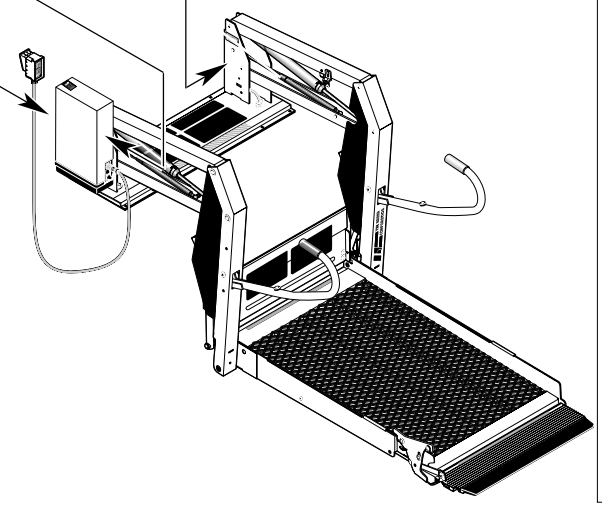
Actual Size:
2-1/8" Wide x 4-7/8" Tall

WARNING
Lift installation and servicing prohibited by anyone who has not been certified by The Braun Corporation Sales and Service School. Certified service technicians should call 1-800-THE LIFT to receive applicable installation/service manual. Failure to follow this policy may result in serious bodily injury and/or property damage.
The Braun Corporation certifies that this wheelchair lift conforms to all applicable requirements of the National Standards for School Buses in effect at the time of its manufacture.

Warning, Relief
Valve Adjustment
Decal #22249


WARNING
Contact The Braun Corporation before adjusting hydraulic pressure relief valve. Failure to do so may result in serious bodily injury and/or property damage.
22249

Actual Size:
1-5/8" Wide
x
2-1/4" Tall

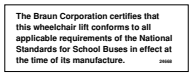


Installation and Service
Manual Policy Warning
Decal #25675

WARNING
Lift installation and servicing prohibited by anyone who has not been certified by The Braun Corporation Sales and Service School. Certified service technicians should call 1-800-THE LIFT to receive applicable installation/service manual. Failure to follow this policy may result in serious bodily injury and/or property damage.
25675

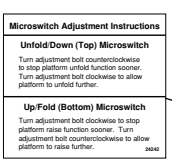
Actual Size:
4" Wide x 2" Tall

NSSB Lift Certification
Decal #24668

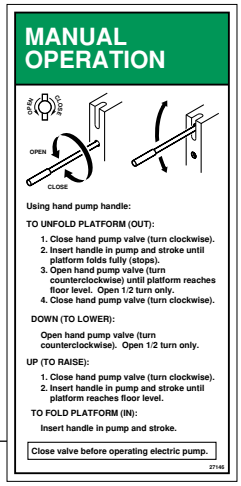

The Braun Corporation certifies that this wheelchair lift conforms to all applicable requirements of the National Standards for School Buses in effect at the time of its manufacture.
24668

Actual Size:
2-3/4" W. x 1" T.

Microswitch
Adjustment
Instructions
Decal #24242


Microswitch Adjustment Instructions
Unfold/Down (Top) Microswitch
Turn adjustment bolt counterclockwise to stop platform unfold function sooner. Turn adjustment bolt clockwise to allow platform to unfold further.
Up/Fold (Bottom) Microswitch
Turn adjustment bolt clockwise to stop platform raise function sooner. Turn adjustment bolt counterclockwise to allow platform to raise further.
24242

Actual Size:
2-1/4" Wide
x
2" Tall


MANUAL OPERATION
RAISE
LOWER
OPEN
CLOSE
Using hand pump handle:
TO UNFOLD PLATFORM (OUT):
1. Close hand pump valve (turn clockwise).
2. Insert handle in pump and stroke until platform folds fully (stops).
3. Open hand pump valve (turn counterclockwise) until platform reaches floor level. Open 1/2 turn only.
4. Close hand pump valve (turn clockwise).
DOWN (TO LOWER):
Open hand pump valve (turn counterclockwise). Open 1/2 turn only.
UP (TO RAISE):
1. Close hand pump valve (turn clockwise).
2. Insert handle in pump and stroke until platform reaches floor level.
TO FOLD PLATFORM (IN):
Insert handle in pump and stroke.
Close valve before operating electric pump.
27146

Manual
Instructions
Decal #27146

Actual Size:
3" Wide
x
6-3/16" Tall

Decals and Antiskid

Antiskid

⚠WARNING

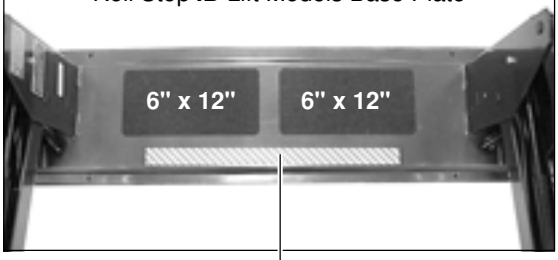
Replace missing or worn antiskid. Failure to do so may result in serious bodily injury and/or property damage.

Note: Clean surfaces as detailed on page 70 **before** antiskid application.

Inspect your lift for any missing or worn antiskid. Call 1-800-THE LIFT for replacements. Use of particular size and quantity of antiskid is dependant on lift model. Order as needed.

Antiskid		
Size	**Color**	**Part No.**
2" x 12"	Black	#24172-BK
2" x 12"	Yellow	#24172-YL
3" x 12"	Black	#24173-BK
3" x 12"	Yellow	#24173-YL
6" x 12"	Black	#24174-BK
6" x 12"	Yellow	#24174-YL

42" Floor-To-Ground **Automatic** Inboard Roll Stop **IB** Lift Models Base Plate



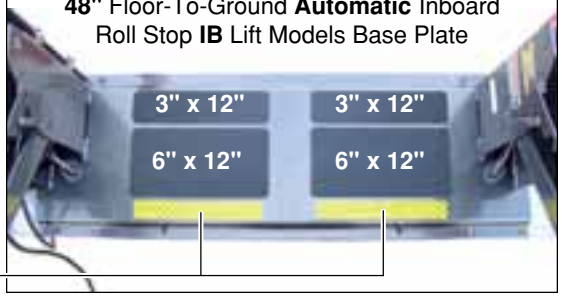
Stripes, Yellow - Lexan Decal #24369

Actual Size: 22" Wide x 1-1/2" Tall

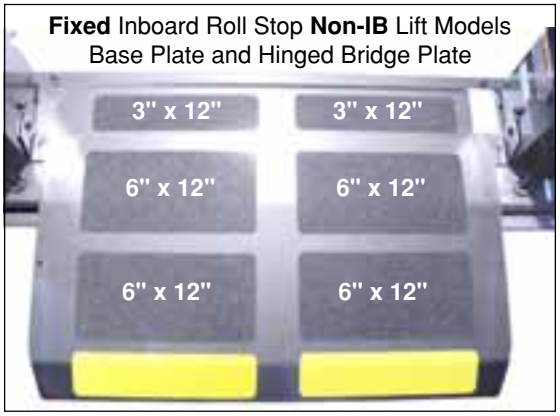
Actual Size: 12" Wide x 1-1/2" Tall

Stripes, Yellow - Lexan Decal #24369-12

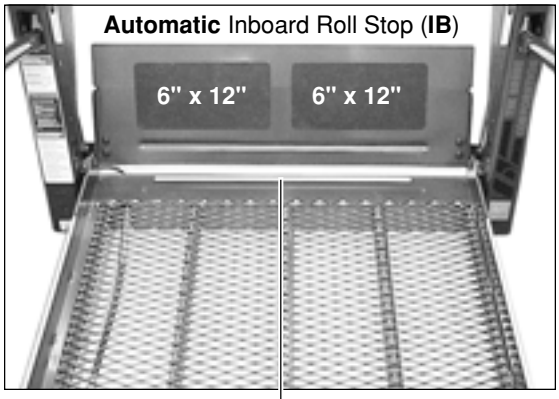
48" Floor-To-Ground **Automatic** Inboard Roll Stop **IB** Lift Models Base Plate

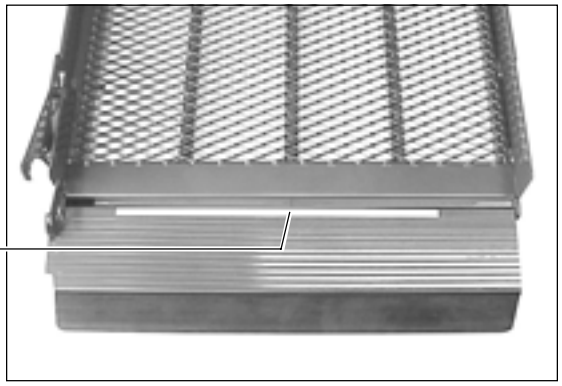


Fixed Inboard Roll Stop **Non-IB** Lift Models Base Plate and Hinged Bridge Plate



Automatic Inboard Roll Stop (**IB**)





Yellow Lexan Boundry Decal #25217

Actual Size: 24" W. x 5/8" T.

Lift Specifications

The following specifications are basic to the electrical/hydraulics operations. Further technical specifications and details of components are provided in the **Systems Descriptions** and **Troubleshooting** sections located within this manual.

Note: Lift weights applicable for rear and front pump lift models.

Lift Model	L915	L915IB	L916	L916IB	L917	L917IB	L918	L918IB	L919	L919IB
Lift Weight	356 lbs	358 lbs	375 lbs	377 lbs	384 lbs	386 lbs	366 lbs	368 lbs	387 lbs	389 lbs

- ❑ **The Lift Series Code:** See the lift-posted Serial No./Series No. Identification tag.
- ❑ **Hydraulic Pump:** M268 factory-equipped **with** a manual Backup Pump (hand pump).
- ❑ **Hydraulic Fluid:** Dextron III automatic transmission fluid. Further hydraulic fluid specifications are provided in the Systems Descriptions section.
- ❑ **Hydraulic Pump Pressure Relief Valve Setting:** M268 is factory set at **2100 psi. Note:** See Systems Descriptions for adjustment procedures.
- ❑ **Design Lifting Capacity:** 800 lbs.
- ❑ **Pump Identification Codes:** 12 volt - 30 and 24 volt - 31 (at time of publication - see lift-posted Serial No./Series No. Identification tag if in doubt).
- ❑ **Power Source:** 12 VDC battery with negative ground **(Standard** Lift Models). **Note:** Special applications powered by 24 volt system.

Operations Cycle Times

The performance data contained within the Operations Cycle Time Charts on page 76 provide general performance criteria. This information is compiled from tests conducted on **standard** L915 Series lift models meeting the following **constant** operational specifications.

Operational Specifications:

1. Environmental temperature of 72° F. Extremely low temperatures can moderately affect cycle time.
2. A 400 pound platform load used in all Lower and Raise operations.
3. Fully charged 12 volt DC power source. Low voltage will moderately affect test results.
4. The Length of Travel dimensions reflect the Maximum Floor-to-Ground dimension for the particular lift models specified in the Operations Cycle Time Charts. **Note:** The Length of Travel dimension will vary with differing lift installation vehicle floor heights. All figures must be calculated per your particular Length of Travel (floor-to-ground) dimension when comparing.

Operation Descriptions:

Platform Unfold (Out) - Platform unfolds from fully-stowed position to floor level position

Platform Lower - Platform only (with 400 lb. load) lowers from floor level position to fully-lowered (ground level) position

Roll Stop Unfold (Deploy) - Roll stop rotates downward from vertical position to ramp position

Roll Stop Fold (Raise) - Roll stop rotates upward from ramp position to vertical position

Platform Raise - Platform only (with 400 lb. load) raises from fully-lowered (ground level) position to floor level position (fully raised) position

Platform Fold (In) - Platform folds from floor level position to fully-stowed position

Lift Specifications

OPERATIONS CYCLE TIME CHARTS

POWERED OPERATIONS - 42" Floor to Ground

Operation	Length of Travel	Duration Minimum to Maximum	Average Duration	Average Length of Travel per Duration
Platform Unfold	Full Stroke Cycle	7.91 sec. to 10.24 sec.	9.08 sec.	Full Stroke Cycle
Platform Lower	42"	8.95 sec. to 10.89 sec.	9.92 sec.	4.23" per sec.
Roll Stop Unfold	Full Stroke Cycle	1.69 sec. to 2.30 sec.	2.0 sec.	Full Stroke Cycle
Roll Stop Fold	Full Stroke Cycle	1.65 sec. to 1.94 sec.	1.80 sec.	Full Stroke Cycle
Platform Raise	42"	13.11 sec. to 14.30 sec.	13.71 sec.	3.06" per sec.
Platform Fold	Full Stroke Cycle	3.71 sec. to 5.10 sec.	4.41 sec.	Full Stroke Cycle

MANUAL BACK-UP PUMP (Hand Pump) OPERATIONS - 42" Floor to Ground

Operation	Length of Travel	Duration Minimum to Maximum	Average Duration	Average Length of Travel per Duration
Platform Unfold	Full Stroke Cycle	8.0 sec. to 9.34 sec.	8.67 sec.	Full Stroke Cycle
Platform Lower	42"	18.38 sec. to 22.38 sec.	20.38 sec.	2.06" per sec.
Roll Stop Unfold	Full Stroke Cycle	1.95 sec. to 2.65 sec.	2.30 sec.	Full Stroke Cycle
Operation	**Length of Travel**	**Number of Strokes**	**Average Number of Strokes**	**Average Length of Travel per Stroke**
Roll Stop Fold	Full Stroke Cycle	9 strokes	9 strokes	Full Stroke Cycle
Platform Raise	42"	55.65 strokes to 65.42 strokes	60.54 strokes	0.69" per Stroke
Platform Fold	Full Stroke Cycle	20 strokes to 23 strokes	21.50 strokes	Full Stroke Cycle

POWERED OPERATIONS - 48" Floor to Ground

Operation	Length of Travel	Duration Minimum to Maximum	Average Duration	Average Length of Travel per Duration
Platform Unfold	Full Stroke Cycle	7.91 sec. to 10.24 sec.	9.075 sec.	Full Stroke Cycle
Platform Lower	48"	10.389 sec. to 12.238 sec.	11.29 sec.	4.28" per sec.
Roll Stop Unfold	Full Stroke Cycle	1.69 sec. to 2.3 sec.	1.995 sec.	Full Stroke Cycle
Roll Stop Fold	Full Stroke Cycle	1.65 sec. to 1.94 sec.	1.795 sec.	Full Stroke Cycle
Platform Raise	48"	15.09 sec. to 16.23 sec.	15.66 sec.	3.064" per sec.
Platform Fold	Full Stroke Cycle	3.71 sec. to 5.10 sec.	4.405 sec.	Full Stroke Cycle

MANUAL BACK-UP PUMP (Hand Pump) OPERATIONS - 48" Floor to Ground

Operation	Length of Travel	Duration Minimum to Maximum	Average Duration	Average Length of Travel per Duration
Platform Unfold	Full Stroke Cycle	8.00 sec. to 9.34 sec.	8.67 sec.	Full Stroke Cycle
Platform Lower	48"	21.38 sec. to 25.19 sec.	23.29 sec.	2.06" per sec.
Roll Stop Unfold	Full Stroke Cycle	2.64 sec. to 2.65 sec.	2.645 sec.	Full Stroke Cycle
Operation	**Length of Travel**	**Number of Strokes**	**Average Number of Strokes**	**Average Length of Travel per Stroke**
Roll Stop Fold	Full Stroke Cycle	9 strokes	9 strokes	Full Stroke Cycle
Platform Raise	48"	64.5 strokes to 73.8 strokes	69.18 strokes	.6938" per Stroke
Platform Fold	Full Stroke Cycle	20 strokes to 23 strokes	21.5 strokes	Full Stroke Cycle

Important: *All figures are approximations based on the* ***constant*** *operational specifications on page 74. When comparing cycle times,* ***be certain*** *all operational specifications have been met and you have checked the Troubleshooting Chart before reporting a service problem. Thank You.*

Lift Dimensions

The chart below provides dimensions of standard production Braun Millennium Series Lift models. Refer to the illustrations on the opposite page and the chart below to determine the appropriate dimensions. Special-order lifts are available to meet user needs, but specific dimensions cannot be listed due to the many possibilities. **If in doubt, consult the factory.**

Minimum Clear Door Opening Dimensions are defined as finished door opening, including any intrusive door jambs, headers, sills or hinges. Any obstructions within the Clear Door Opening **must** be removed. See the Pre-Installation Notes for details. **Braun Bus Door Kits:** Braun Retrofit Bus Door Kits are available to provide the required clear opening dimensions.

Dimension Description	
A	**Clear Passageway Width:** The maximum width wheelchair or object that can pass through the lift platform and frame.
B	**Clear Platform Length:** The maximum usable length of platform.
C	**Clear Vertical Passageway:** The maximum height wheelchair or object that can pass through the lift frame with the lift at floor level.
D	**Minimum Clear Door Opening Height:** The minimum clear vertical finished (trimmed out) door opening height that the platform will fold out of.
E	**Maximum Clear Door Opening Height:** The maximum clear vertical finished (trimmed out) door opening height recommended.

Dimension Description	
F	**Overall Lift Height:** The overall height of the lift in the stowed position, measured from the floor to the top of the lift.
G	**Maximum Floor-to-Ground:** The maximum distance that a lift will reach from the finish floor of the vehicle to the ground as measured vertically.
H	**Clear Door Opening Width:** The minimum clear horizontal finished (trimmed out) door opening width that the lift will pass through.
I	**Overall Lift Width:** The overall width of the entire lift.
J	**Depth:** Inboard edge of pump module to outermost point of lift in stowed position.

Fixed Inboard Roll Stop-Equipped (**non-IB**) Lift Models

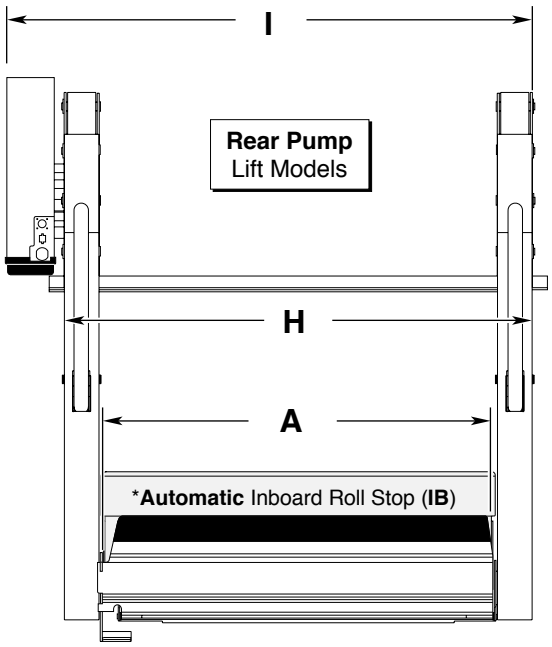
Dimension		Dimensions per Lift Model									
		L915	L915F	L916	L916F	L917	L917F	L918	L918F	L919	L919F
A	Clear Passageway Width	30"	30"	30"	30"	33"	33"	33"	33"	34"	34"
B	Clear Platform Length	48"	48"	48"	48"	48"	48"	48"	48"	51"	51"
C	Clear Vertical Passageway	*	*	*	*	*	*	*	*	*	*
D	Minimum Clear Door Opening Height	55-1/4"	55-1/4"	56-3/4"	56-3/4"	56-3/4"	56-3/4"	55-1/4"	55-1/4"	56-3/4"	56-3/4"
E	Maximum Clear Door Opening Height	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
F	Overall Lift Height	54-3/4"	54-3/4"	56-1/4"	56-1/4"	56-1/4"	56-1/4"	54-3/4"	54-3/4"	56-1/4"	56-1/4"
G	Maximum Floor-to-Ground	42"	42"	48"	48"	48"	48"	42"	42"	48"	48"
H	Clear Door Opening Width	39"	39"	39"	39"	42"	42"	42"	42"	43"	43"
I	Overall Lift Width	42-1/4"	42-1/4"	42-1/4"	42-1/4"	45-1/4"	45-1/4"	45-1/4"	45-1/4"	46-1/4"	46-1/4"
J	Depth	14"	14"	14"	14"	14"	14"	14"	14"	14"	14"

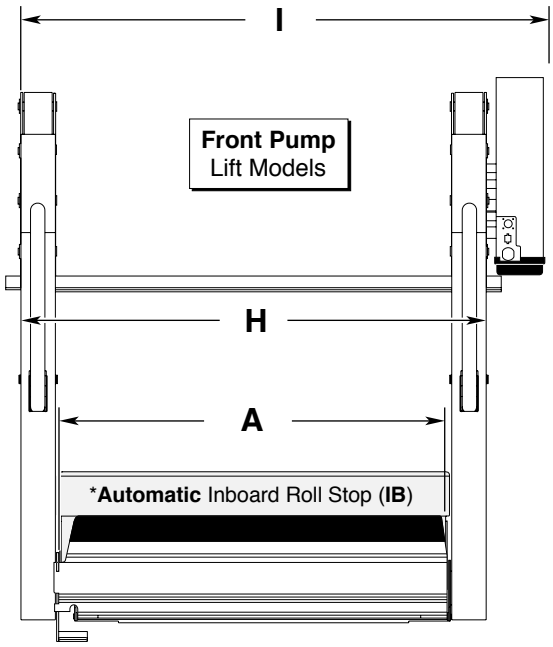
Automatic Inboard Roll Stop-Equipped (**IB**) Lift Models

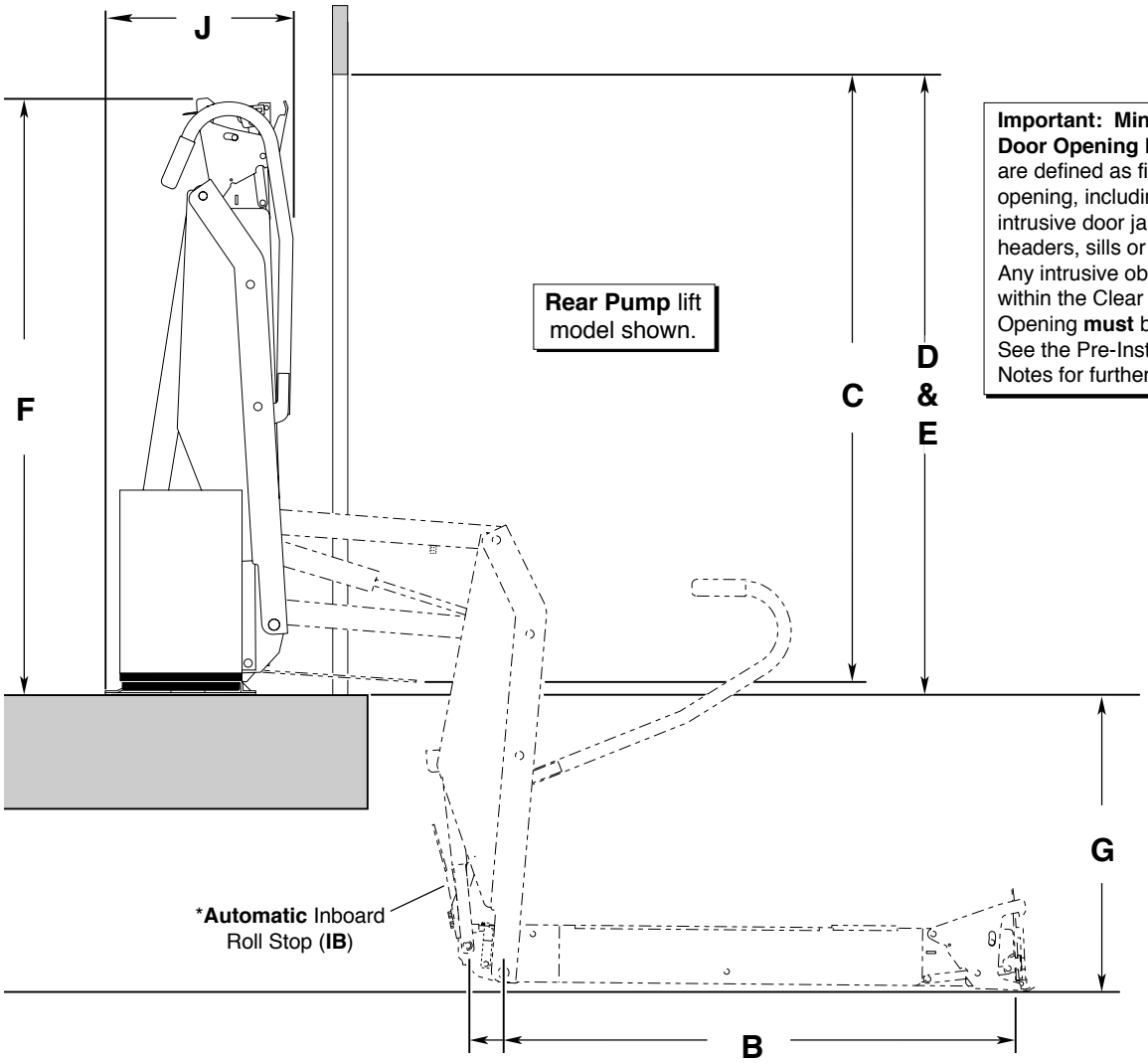
Dimension		Dimensions per Lift Model									
		L915IB	L915FIB	L916IB	L916FIB	L917IB	L917FIB	L918IB	L918FIB	L919IB	L919FIB
A	Clear Passageway Width	30"	30"	30"	30"	33"	33"	33"	33"	34"	34"
B	Clear Platform Length	51"	51"	51"	51"	51"	51"	51"	51"	51"	51"
C	Clear Vertical Passageway	*	*	*	*	*	*	*	*	*	*
D	Minimum Clear Door Opening Height	55-1/4"	55-1/4"	56-3/4"	56-3/4"	56-3/4"	56-3/4"	55-1/4"	55-1/4"	56-3/4"	56-3/4"
E	Maximum Clear Door Opening Height	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
F	Overall Lift Height	54-3/4"	54-3/4"	56-1/4"	56-1/4"	56-1/4"	56-1/4"	54-3/4"	54-3/4"	56-1/4"	56-1/4"
G	Maximum Floor-to-Ground	42"	42"	48"	48"	48"	48"	42"	42"	48"	48"
H	Clear Door Opening Width	39"	39"	39"	39"	42"	42"	42"	42"	43"	43"
I	Overall Lift Width	42-1/4"	42-1/4"	42-1/4"	42-1/4"	45-1/4"	45-1/4"	45-1/4"	45-1/4"	46-1/4"	46-1/4"
J	Depth	14"	14"	14"	14"	14"	14"	14"	14"	14"	14"

* The **Clear Vertical Passageway** is 1-3/8" less than the door opening height.

Lift Dimensions







Important: Minimum Clear Door Opening Dimensions are defined as finished door opening, including any intrusive door jambs, headers, sills or hinges. Any intrusive obstructions within the Clear Door Opening **must** be removed. See the Pre-Installation Notes for further details.

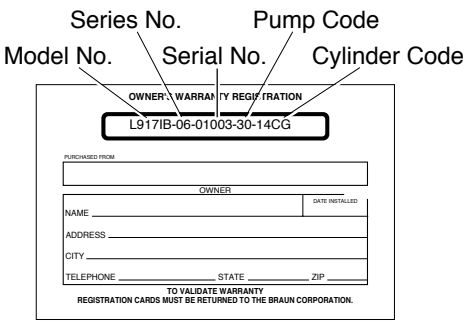
Warranty and Registration Policy

Immediately upon receiving your lift, examine the unit for any damage. Notify the carrier at once with any claims.

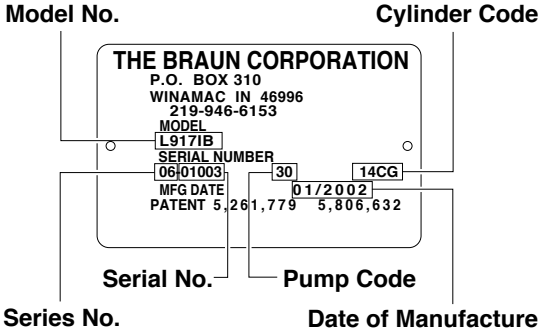
Two warranty/registration cards (shown below) are located in the lift-mounted owner's manual storage pouch. The sales representative must process one of the cards. The consumer must fill out the other card and mail it to The Braun Corporation. The warranty is provided on the back cover of this manual. The **warranty cards must be processed to activate the warranty**.

The Braun Serial No./Series No. identification tag (shown below) is located on the opposite pump side tower. This I.D. tag contains the product identification information provided on the Warranty/Registration card. Record the information in the space provided below (or document on a copy).

This information must be provided when filing a warranty claim or ordering parts.



Sample Warranty/Registration Card



Sample Serial No./Series No. Identification Tag

Model No. _____ Pump Code _____

Series No. _____ Cylinder Code _____

Serial No. _____ Date of Manufacture _____

Note: Retain this information for future use. You must have this information when filing a warranty claim or ordering

Return Authorization Procedure

When processing any warranty claims (parts, repairs, etc.), all requests must be processed through The Braun Corporation Product Support Department. Call 1-800-THE LIFT (extension 3009) during normal working hours. Product Support will issue a Return Material Authorization (RMA) number and detail the procedures required for processing returns and/or authorizing credit.

The lift identification information is provided on the Braun Serial No./Series No. identification tag and the two warranty cards (shown above). Record the identification information in the space provided on the inside front cover of this manual for future reference. Document the identification information in the space provided in the section above also. This information must be provided when filing a warranty claim or ordering parts.

Daily Preventive Maintenance Schedule

Vehicle Number: _____ Date: _____

Inspector: _____

Pre-Trip Inspection:

Before each scheduled day of lift service, operate lift **minimum one complete cycle** and inspect each of the following :

- [x] Does the lift interlock (if equipped) function as intended?
- [ ] Does the lift cargo door light (if equipped) function as intended?
- [ ] Does the lift deploy when the lift interlock is activated as intended?
- [ ] Does the lift safely clear the cargo door as the lift is deployed and stowed?
- [ ] Does the lift operate smoothly (no jerking or abnormal movement)?
- [ ] Does the lift operate at normal speed?
- [ ] Is the lift power source adequate?
- [ ] Does the roll stop(s) operate properly?
- [ ] Does the outboard roll stop latch operate properly?
- [ ] Do the handrails operate properly?
- [ ] Is the platform angle normal?
- [ ] Is lift operation quiet (no rattles, abnormal sounds, etc.)?
- [ ] Has the hand-held switch box cable been damaged?
- [ ] Do the lift control switches function properly?
- [ ] Do the lift cargo door securement devices function as intended?
- [ ] Is the manual back-up pump handle in place?
- [ ] Is the hand pump valve closed securely (tight)?
- [ ] Are the lift-posted and door-posted decals worn, missing or illegible?
- [ ] Is the lift protective padding (if equipped) in place, worn or damaged?
- [ ] Can you visually detect any lift wear, damage, misalignment, hydraulic leaks, loose bolts, broken welds or any abnormal conditions?

Post-Trip Inspection:

Operate lift **minimum one complete cycle** and check each of the above daily pre-trip inspections **if applicable** for your daily inspection routine (outlined by your transit agency).

- [ ] Clean lift surfaces where wheelchairs travel
- [ ] Clean and lubricate key locations based on lift usage frequency and climate conditions (outlined by your transit agency). Lubrication procedures should be performed by transit agency maintenance personnel.

Lift Installation Checklist

Feb. 2002

Installation Date: _____ Installed By: _____

Lift Model: _____ Inspected By: _____

Lift Serial Number: _____

Warranty/Registration card processed by: _____ Date: _____

☑ Positioning and Clearance Checklist

☐ Is the lift centered in the door opening with the lift base plate parallel (aligned) with the door opening (at floor level)?

Viewing the lift from outside the vehicle:

☐ Are the vertical arms and platform aligned and parallel with the sides of the door jamb (page 23 - points 8 and 9)? **Note:** The lift towers (upright supports) should be perpendicular (90°) to the vehicle floor.

Viewing the lift from "pump side" to "opposite pump side" of the vehicle:

☐ Are the vertical arms and parallel arms aligned and parallel with each other (page 23 - point 10)?

☐ Are the towers (upright supports) perpendicular (90°) to the vehicle floor **except when base plate wedges are used** (page 23 - point 11)?

Viewing the lift from outside the vehicle, when unfolding and folding the lift:

☐ Do the vertical arms and parallel arms clear the door opening (vertical sides) as the lift unfolds and folds (page 23 - points 1 and 2)?

☐ Is there a **minimum 1/8" clearance** between the deployed bridge plate and any obstruction on the vehicle floor (page 23 - point 4)?

☐ Is the floor level positioning correct (all lift models), and does the automatic inboard roll stop (**IB** lift models) rest fully on the lift base plate when the platform is positioned at floor level as detailed on pages 38 and 39?

☐ Is the hydraulic platform sensor (fold) pressure switch properly adjusted (as detailed on pages 41 and 42)?

☐ Do the handrails operate properly (folding/unfolding) and are the handrails properly aligned (during all lift functions)?

See reverse side also

Lift Installation Checklist

Feb. 2002

When lowering and raising the platform:

- ❑ Does the lift clear the vehicle body by a **minimum 1" clearance** (page 12 and page 23 - point 7)?
- ❑ Do the parallel arms (bottom side) clear the door sill when the lift is fully lowered (page 23 - point 3)?
- ❑ Is the platform angle properly adjusted (pages 26 and 27), and is the floor level adjustment correct (pages 38 and 39)?

☑ Installation Details Checklist

- ❑ Is the base plate secured through the vehicle floor with eight bolts (pages 13-16)?
- ❑ Are the underfloor reinforcement brackets installed as detailed on pages 13-16?
- ❑ Are the ground cable, power cable and Circuit Sentry installed as detailed on pages 17-19?
- ❑ Is the control box mounted to door as detailed and is the control box cable routed and secured as detailed on pages 20 and 21? **Note:** Open and close door and function lift through cycles to be certain the control box and cable clear the door and other moving parts.
- ❑ Have all decals been posted on the vehicle interior door panel next to the lift control box (page 24)?
- ❑ Have any necessary Quiet-Ride adjustments been made as outlined on pages 28 and 29?
- ❑ Has the optional padding kit been installed (if applicable)?
- ❑ Is the lift owner's (operator's) manual stored in the lift-mounted manual storage pouch for the consumer?
- ❑ Has The Braun Corporation Warranty/Registration card been filled out, processed and mailed to The Braun Corporation?

See reverse side also

Millennium Series Lift
Braun "Worry-Free"
Five-Year Limited Warranty

The Braun Corporation of Winamac, Indiana, warrants its wheelchair lift against defects in material and workmanship for up to five years*, providing the lift is installed, operated and maintained properly and in conformity with this manual. This warranty is limited to the original purchaser and does not cover defects in the motor vehicle on which it is installed, or defects in the lift caused by a defect in any part of the motor vehicle.

This warranty commences on the date the lift is put into service, providing the warranty registration card is completed and received by The Braun Corporation within twenty days of purchase. If no warranty card is received, the warranty will expire three years from the date of manufacture as identified on the lift serial number tag.

This warranty also covers the cost of labor for the repair or replacement of parts for three years when performed by an approved Braun Dealer. (A labor schedule determines cost allowance for repairs, which can be provided upon request by an approved Braun Dealer).

This warranty does not cover normal maintenance, service, or periodic adjustments necessitated by use or wear. The Braun Corporation will not, under any circumstances, pay for loss of use, incidental or consequential damages related to the lift, or vehicle in which it is installed.

This warranty will become null and void if the lift has been damaged through accident, misuse, or neglect, or if the lift has been altered in any respect.

* The five-year portion of this warranty covers the following lift's power train parts:
▪ Chain ▪ Cylinder ▪ Flow Control ▪ Gear Box ▪ Motor ▪ Pump ▪ Hydraulic Hose & Fittings
▪ Solid State Controller

All remaining lift components are covered by a three-year warranty.

Return Authorization Procedure

When processing any warranty claims (parts, repairs, etc.), all requests must be processed through The Braun Corporation Product Support Department. Call 1-800-THE LIFT (extension 3009) during normal working hours. Product Support will issue a Return Material Authorization (RMA) number and detail the procedures required for processing returns and/or authorizing credit.

The lift identification information is provided on the Braun Serial No./Series No. identification tag and the two warranty cards (shown on inside front cover). The lift identification information must be provided when filing a warranty claim or ordering parts.

Applicable for Series 06 Millennium™ Wheelchair Lifts

25522-06 July 2002

complying with ADA Americans With Disabilities Act

THE BRAUN CORPORATION®
"Providing Access to the World"®
International Corporate Hdqrs: P.O. Box 310 Winamac, IN 46996 USA
1-800-THE LIFT (574) 946-6153 FAX: (574) 946-4670

Braun Millennium Series™

All illustrations, descriptions and specifications in this manual are based on the latest product information available at the time of publication. The Braun Corporation reserves the right to make changes at any time without notice.

Patent #5,261,779 Patent #6,065,924
Patent #5,806,632 Patent #6,238,169 Patents Pending

© The Braun Corporation